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**The Winrock International Institute
for Agricultural Development**

On-farm Productivity Enhancement Program
(OFPEP)

Final Evaluation
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ANNEXES

- A Scope of Work
- B Itinerary
- C List of Persons Contacted
- D References Consulted
- E Lessons Learned by Winrock from the OFPEP Experience

FIGURES, TABLES, AND CHARTS

Figure A OFPEP Management and Organizational Chart

Chart 3 1 4 Upstream-Downstream Linkages

Table 1 Technologies introduced by OFPEP in target rural communities in the four host countries over the indicated duration of activities

Table 2 Some positive farmer level impacts of technologies introduced by OFPEP in target communities in the four host countries

Table 3 The shift in rice yields in paired demonstration plots with and without NPK fertilizer application as indicated by the number of plots falling in specified yield ranges for two villages in Nioro and two villages in Kolda

Figure 1 Cumulative frequency distributions of yields (shown in Table 3) with (closed squares) and without (closed circles) NPK fertilizers for 2 villages in Nioro and 2 villages in Kolda

TABLE OF CONTENTS

Acronyms	iv
Executive summary	v
Evaluation Findings	vii
Recommendations	x
 INTRODUCTION AND BACKGROUND	
1 1 1 Brief Description of Winrock International	1
1 2 Description of the Matching Grant	1
1 3 Purpose and Methodology of the Evaluation	2
1 4 Evaluation Methodology	2
 2 INSTITUTIONAL ASSESSMENT	
2 0 Introduction	4
2 1 Culture, Values and Style of Operation	4
2 2 Organization and Management	6
2 3 Communications	8
2 4 Focus and Clarity of Mission	9
2 5 Staffing and Staff Training	11
2 6 Financial Management	11
2 7 Monitoring and Evaluation	13
2 8 Matching Grant Extension	14
2 9 Implications of Growth	16
 3 INSTITUTIONAL AND FARMER IMPACTS	
3 1 Institutional Impacts	18
3 1 1 Strengths of the Collaborative Approach	18
3 1 2 Challenges in the Approach	19
3 1 3 Selection of Partners	20
3 1 4 Upstream-Downstream Linkages	22
3 2 Framework for Assessing the Farmer Impacts	23
3 2 1 Technologies Introduced by OFPEP	24
3 2 2 Overall Impact of OFPEP in Target Communities	28
3 2 3 Limitations of the Demand-Driven Approach	28
3 2 4 The Need for Research Support Linkages	30
3 2 5 Findings and Conclusions on Farmer Impacts	34
3 3 Findings - Senegal	36
3 4 Findings - Uganda	40
3 5 Findings - Kenya	44
3 6 Findings - Ethiopia	48

ACRONYMS

ACDI/VOCA	Agricultural Cooperative Development International/ Volunteers in Cooperative Assistance
AID/BHR/PVC	Agency for International Development, Bureau for Humanitarian Response, Office of Private and Voluntary Cooperation
AVA	African Village Academy (Ethiopia)
ASE	Agri Services Ethiopia
CBO	Community-based Organization
CCF	Christian Children's Fund
COOPIBO	Belgian NGO (Uganda)
DIP	Detailed Implementation Plan
FICAH	Food Industry Crusade Against Hunger
FIFM	Farmer Implemented and Managed
GIE	Groupe d'Interet Economique (Senegal)
ICRAF	International Center for Research in Agroforestry
IDEA	Investment in Developing Export Agriculture (USAID/Uganda)
ISRA	Institut Senegalais de Recherche Agricole (Senegal)
JEEP	Joint Energy and Environmental Projects (Uganda)
LAGROTECH	Lowland Agricultural and Technical Services (Kenya)
NARO	National Agriculture Research Organizations (Uganda)
NGO	Non-governmental Organization
NRBAR	Natural Resource-based Agricultural Research (Senegal) - USAID-funded project
OFPEP	On-farm Productivity Enhancement Program
OFSP	On-farm Seed Project
Pact	previously known as PACT (Private Agencies Collaborating Together)
PCV	Peace Corps Volunteer
PRA	Participatory Rural Appraisal
PVO	Private Voluntary Organization (US based)
PVO/University Center	Center for PVO/University Collaboration in Development
RADORT	Research on Accelerated Diffusion of Rice Technologies
TOT	Training of Trainers
WARDA	West Africa Rice Development Association
WI	Winrock International Institute for Agricultural Development
WVI	World Vision International

EXECUTIVE SUMMARY

The On-farm Productivity Enhancement Program (OFPEP) was initiated by Winrock International and a number of collaborating partners with USAID Matching Grant support in October 1992. Central to its purpose is to address two major constraints to agricultural production:

- 1) availability of viable seeds of appropriate varieties of basic food crops, and
- 2) improvement and sustainability of soil fertility through management practices

The program is an outgrowth of the USAID Matching Grant-supported On-farm Seed Project (OFSP) which began in 1987 in Senegal and The Gambia. Success of this project in improving smallholder access to and use of viable seeds of improved varieties led to a continuation, with increased emphasis on cultural practices, particularly soil fertility and improved soil management. The anticipated funding level of the current five-year Matching Grant is \$2,999,350.

OFPEP is concerned with integrating sound technical knowledge with social, cultural and educational conditions at the farm level. Unlike most agricultural projects in Africa, which tend to be top-down, OFPEP uses a participatory, request-driven approach where farmers with assistance from OFPEP and its implementing partners use participatory rural appraisal (PRA) techniques to identify problems and potential solutions related to agricultural productivity. OFPEP then serves as a liaison between PVOs, NGOs, and other community groups and research institutions that provide training and information about the tested techniques to stem the decline in soil fertility and improve crop production through better seed varieties.

OFPEP initially began operating in Senegal, The Gambia, and Uganda. The program was later approved for Kenya, and, more recently, with the decision of USAID to discontinue working in The Gambia, USAID approved transfer of the allocated funds to open operations in Ethiopia in 1995. This evaluation, conducted in May, 1997, included short field visits to all four OFPEP program countries.

The evaluation revealed that OFPEP is on track to meet the goals and objectives of the Matching Grant. Field visits confirmed that OFPEP has had considerable impact on actual agricultural production, food security and income generation. Largely due to exposure to and adoption of OFPEP technologies, farmers have increased productivity in rice, sorghum, millet, groundnuts, maize, cowpeas, cassava, wheat, teff, barley, and vegetables. It is estimated that more than 250,000 farmers are participating in OFPEP, and the evaluation team saw evidence that the program's technologies were being adopted by non-participants.

There was also anecdotal evidence that OFPEP has contributed to changes in the daily lives of farmers. Although hard to document, farmers, many of them women, spoke of having more options and greater control over the decision-making processes that affect their daily lives.

In addition to these and other impacts on farmers, OFPEP has impacted a number of implementing partners in the four countries through training and technical assistance and backstopping. Working

with these groups has allowed for extension and diffusion of seed and soil technologies. Indeed, the evaluation showed that many of these groups have benefited from increased program impact, capacity and prestige as a direct result of their participation in OFPEP.

The evaluation also found that OFPEP has forged important linkages with research and academic institutions in the four countries. While not enough of these linkages have been sufficiently operationalized during the course of the grant, they offer potential to test and validate research aimed at improving production at the farm level.

OFPEP has been opportunistic both programmatically and operationally. In all four countries, crops and technologies not in the original program document have been added to meet farmer needs and requests for assistance. Other funding mechanisms, some not traditional for non-governmental organizations (NGOs), have been pursued to help finance these activities.

The evaluation team found that OFPEP has been appropriate and effective and that it should be strengthened and continued. The team's few recommendations focus on opportunities brought on by OFPEP's evolution since the beginning of the grant and on future action. Key among these recommendations is that OFPEP expand its objective from improving production to helping subsistence farmers become commercial producers. It is recommended that this be done by introducing more technologies and by consolidating certain on-going activities, up-grading staff capacity to train, and making the linkages with research institutions more substantive through joint strategies. The team also concluded that although OFPEP is doing relatively well in basic program monitoring and documentation, it could do more to capture its achievements and validate the merit of its participatory approach.

EVALUATION FINDINGS

The following is a summary of major evaluation findings (see Section 3.3 for country-specific findings)

- In all four program countries (Senegal, Uganda, Kenya, and Ethiopia), OFPEP has had a positive impact on actual agricultural production, food security and farmer income
- In contrast to traditional project-oriented technology programs, OFPEP is *participatory* and *demand-driven*. Rather than *promoting* technologies, OFPEP is working with farmers to identify constraints to production and then is *introducing* technologies from which farmers can choose to adopt or not adopt. Farmers are involved in program planning, implementation and monitoring and, consequently, this approach appears to be sustainable
- An estimated 250,000 small and mostly poor farmers, many of them women, have learned or are learning about testing and implementing improved seed varieties and soil management technologies for producing basic food crops. Depending on the country and on local ecologies and cultural practices, OFPEP has helped farmers to increase productivity of rice, sorghum, millet, groundnuts, maize, cowpeas, soybeans, cassava, wheat, teff, barley, and vegetables. Farmers have eliminated or are reducing the length of the *hungry season* and, in some cases, are producing surpluses for sale
- Field visits and discussions with farmers and farmers' groups reconfirmed that seeds and soil fertility are priorities for the African farmer. This reaffirms that the technologies being introduced by OFPEP are relevant as they address real, not perceived obstacles to production. The technologies most in demand were those that addressed food security and income generation
- There was anecdotal evidence that OFPEP has contributed to changes in the daily lives of farmers who have adopted the program's technologies. Farmers and farmers' groups spoke of having more options and greater control over the decision-making processes that affect their daily lives
- There is anecdotal evidence that OFPEP has improved the capacity of participating NGOs and CBOs (community based organizations) to plan, organize, and provide training. Many groups enjoy increased credibility and prestige because of their participation in OFPEP
- Similarly, OFPEP has helped foster empowerment of women. First, this is done by increasing women's prestige as agricultural producers through the introduction and adoption of production technologies and second, by strengthening the capacity of women's groups to plan, implement, and advocate for programs

- There is quantitative and anecdotal data that OFPEP technologies are being diffused laterally and adopted by non-OFPPEP participants
- In addition to working with more than sixty NGOs and farmers' groups, OFPEP has forged important linkages with research and technical institutions in all four countries. This is significant as these linkages operate in both directions between the institutions and farmers, and offer opportunities to test and validate research aimed at improving production
- One inherent weakness in OFPEP is its reliance on partner organizations for data collection and reporting. Few groups seem to have the organizational capacity to provide accurate and timely information. The need to have accurate data for research and program management has placed a burden on OFPEP staff to collect and analyze data themselves
- OFPEP has been opportunistic programmatically and operationally. In all four countries, crops and technologies not in the original program document have been added to meet farmer needs. Other funding mechanisms, some not traditional for NGOs, have been pursued to help finance these activities
- Despite the apparent complexity of OFPEP's overall management structure, which involves long distances, many players (including WI, the PVO/University Center, four country staffs, and international and local partner agencies), many funding entities and multiple field sites covering large geographic areas, the program appears to be well-managed
- Although highly successful by many indicators, OFPEP's participatory and demand-driven program is not without weakness. Participation is, by nature, process-oriented and slow. There is a definite limit to OFPEP's capacity to expand continually in order to respond to the myriad needs (requests) of farmers. This is leading to over-extension of organizational capacity and is diluting the effect of OFPEP activities and services. Moreover, once technology is adopted it automatically generates the need for further technology change and necessitates more follow-up activity
- OFPEP helps fill a void associated with 1) major obstacles to food production and food security in Africa, 2) the ineffectiveness of government extension programs in the four countries, and 3) a lack of linkage between agricultural research institutions and the farmers who are supposed to derive benefits from research and who offer opportunities to test research at the smallholder level
- OFPEP is in high demand by farmers because it fills a wide gap between research and extension. It is working with more farmers and farmers' groups, with more crops and seed and soil technologies, and in more geographic areas than outlined in the grant proposal and the detailed implementation plan (DIP). Additionally, some research institutions are beginning to see the value of an OFPEP-type program as a broker between their work and farmers. This is

leading, if it has not already, to a situation where the capacity of OFPEP (and its implementing partners) is being exceeded

- Similarly, the opportunistic way in which Winrock has approached project funding and partnerships also has shortcomings. Although most partnership choices have been inspired and mutually beneficial, these organizations have their own agendas and timelines, and vary greatly in capacity. Few, if any, groups are in sync with OFPEP, and OFPEP staff must devise separate strategies to work with each partner group.
- OFPEP country staff are knowledgeable about the technologies that they are introducing. For most training to NGOs or lead farmers they rely on training of trainers (TOT), meetings and workshops, demonstration plots, and one-on-one follow-up consultations. Some members of OFPEP staff appear to be less than comfortable with these training methodologies, and all would benefit from exposure to others such as advanced TOT and participatory rural appraisal (PRA). In all countries, training methodologies need to be reviewed and expanded and follow-up to training needs to be routinized. Also, OFPEP/Kenya staff is severely hampered by lack of transport.
- The evaluation team heard many requests from farmers for training in non-production technologies and activities including credit, integrated pest management, marketing and post-harvest storage.
- The progress of the program over the past five years illustrates that OFPEP is poised to move onto Winrock's new paradigm *From Subsistence to Commercial*. Some OFPEP-trained lead farmers, for example, are already adopting technologies that have put them past subsistence level. A few have become *de facto* seed contractors. Some appear to be in a position where the use of small-scale equipment such as seeders would put them over the hump to become commercial. This would appear to be a natural development for the program. Logic indicates that this may be necessary, as the high labor-intensity of OFPEP's low-resource approach will ultimately reach a saturation point.
- OFPEP is not doing enough to capture its achievements. Although progress has been made in the program's monitoring system, the current system does not provide the best information to make better management decisions about the program or to approach potential funders. Efforts should be made to better demonstrate how OFPEP is influencing the lives of farmers. This is particularly important as OFPEP's future funding is uncertain in all four program countries, and Winrock is exploring funding opportunities.

RECOMMENDATIONS

The evaluation team recommends that OFPEP take the following courses of action if it is to continue to be effective and to improve

1) **Expand the program objectives** The evaluation has shown that among OFPEP's greatest achievements has been the adoption of OFPEP technologies to the point where some farmers have moved from mere subsistence farming to becoming commercial producers. The evaluation also concludes that because of the labor-intensity of OFPEP's low-resource technologies, there is a limit as to how much or how many of these technologies farmers are able to take on and at what point returns on this investment of time and labor decrease. Moreover, there is a sense that in some instances the introduction of small machinery such as simple seeders or inputs such as rock phosphate may be the most appropriate technology to help improve production. With these in mind **the team recommends that Winrock expand the OFPEP program objective from improving agricultural production and food security to include, where practical, assisting small farmers to move from mere subsistence farming to becoming small-scale commercial producers**

2) **Expand technologies** During visits to the field and meetings with OFPEP partners and farmers, the evaluation team heard, in addition to requests for production assistance, great interest in pre- and post-production areas. Areas of greatest interest were credit, marketing, post-harvest storage processing and integrated pest management. It appeared to the team that the introduction of non-production technologies would be appropriate for OFPEP in instances when it complemented country strategy, was sequentially appropriate, and was within the capacity of OFPEP staff and the corresponding partner organizations. **It is recommended that in certain instances where there is interest and capacity, pre-production and post-production activities be considered as part of the OFPEP approach and introduced to farmers**

3) **Consolidate activities** OFPEP is in great demand by farmers and partner institutions because of its appeal and achievements, and the fact that it fills a wide gap. This demand, plus the request-driven aspect of the program, have led OFPEP to expand at such a rapid rate that OFPEP's small staff is over-extended and there is a risk that the impact of the program will be diluted. Working with new and nascent groups has been especially time-consuming and demanding. To maintain program quality and not over-stretch staff capacity, **it is recommended that OFPEP country activities be consolidated geographically to fewer regions and districts as well as to mature implementing partners that have some demonstrated capacity for training and program implementation**. **It is further recommended that in order to clarify roles and expectations, including reporting requirements, OFPEP enter into a formal written agreement with each implementing partner**

4) **Improve research linkages** The evaluation revealed that, although OFPEP has had significant success in introducing seed and soil fertility technologies to farmers through its implementing partners, it has been less successful in meeting the objective of linking these groups with national

and regional research and academic institutions. The evaluation team concluded that OFPEP's country and regional coordinators enjoy collegial relationships with, and free access to, these institutions, but there has been a natural tendency and preference of OFPEP staff to want to work at the grassroots level. Through consolidation efforts suggested in #3, it is hoped that more time would be made available for upstream linkages. **The evaluation team recommends that each OFPEP country program work jointly with current and potential research linkages in order to develop a liaison strategy.**

5) Improve staff technical and training capacity. Although OFPEP staff are well-known and highly regarded in all four program countries, an overextended workload and an increasing number of complex technologies requested by farmers is resulting in a need for more planning and more technical knowledge. The evaluation also revealed that some staff are not altogether comfortable in their roles as trainers and all could benefit from new and alternative training methodologies. **The evaluation team recommends that OFPEP staff will receive regular supplemental training in production technologies and be introduced to alternative training methodologies including advanced versions of TOT and PRA.**

6) Improve the capability to capture the OFPEP experience. The evaluation revealed that OFPEP is doing relatively well in basic program monitoring and in documenting evidence related to OFPEP technologies. It does not appear, however, that OFPEP has done enough to validate its overall participatory, demand-driven approach. To the team, this seems critical as OFPEP is faced with some levels of uncertainty regarding future funding in the four program countries, has an interest in expanding to other countries, and has begun to approach non-USAID sources of funding for support. Because the 18-month extension of the matching grant represents a transition time of sorts, **it is recommended that WI and the PVO/University Center develop ways of better capturing the achievements of OFPEP with an eye towards validating the OFPEP approach.**

1 INTRODUCTION AND BACKGROUND

1.1 Brief Description of Winrock International

The Winrock International Institute for Agricultural Development (WI) was established in 1985 with the merger of three different institutions: The Agriculture Development Council, The International Agricultural Development Service, and The Winrock International Livestock Research and Training Center. Since the merger, Winrock has operated with a mission statement oriented to reducing hunger and poverty through sustainable agriculture and rural development. Winrock is headquartered at Petit Jean Mountain in Morrilton, Arkansas and has an office in Rosslyn, Virginia.

Winrock is presently implementing more than 80 projects in 30 countries, addressing the concerns of agricultural development, rural economic development, environment and natural resources, and renewable energy. Winrock describes itself as unique in the market place because it is a contract-seeking, service-delivering organization as well as a vision-driven non-profit organization. It believes that its dual nature offers great comparative advantage and flexibility that is unavailable to its competitors.

1.2 Description of the Matching Grant

The On-farm Productivity Enhancement Program (OFPEP) was launched by Winrock and a number of collaborating partners with USAID Matching Grant support in October 1992 to address two major technology constraints to agricultural production in Africa:

- 1) availability of viable seeds of appropriate varieties of basic food crops, and
- 2) improvement and sustainability of soil fertility through management practices

The program is an outgrowth of the USAID Matching Grant-supported On-farm Seed Project (OFSP) which began in 1987 in Senegal and The Gambia. Success of this project in improving smallholder access to and use of viable seeds of improved varieties of food crops led to a continuation, with increased emphasis on cultural practices, particularly soil fertility and improved soil management.

OFPEP is concerned with integrating sound technical knowledge with the social, cultural and educational conditions of smallholder farmers. OFPEP uses an approach based on participatory rural appraisal (PRA) techniques to help communities to identify problems and work out potential solutions related to agricultural productivity. It then serves as a liaison between PVOs, NGOs, and other community groups and research institutions that provide training and information about the tested techniques to stem the decline of soil fertility and to improve crop production through improved seed varieties.

Simple techniques such as applying animal manures as fertilizer, composting crop residues, planting seeds of improved varieties or inoculating seeds with rhizobium, are demonstrated on farmers' fields. The farmers become involved in evaluating the usefulness of the technologies for their particular situations, make suggestions for adaptations, and then try the new techniques again. Results of these simple innovations is spread in the country and throughout the OFPEP network by word of mouth, cross-visits and written materials.

OFPEP is also supported by the PVO/University Center for Collaboration in Development. The Center is responsible principally for establishing linkages, documenting the program and gathering and disseminating information.

OFPEP initially began operating in Senegal, The Gambia, and Uganda. The program was later approved for Kenya, and more recently, with the decision of USAID to discontinue working in The Gambia, USAID approved transfer of the allocated funds to open operations in Ethiopia in 1995. Winrock serves as the lead agency for OFPEP in Senegal and Kenya. In Uganda, the lead agency under the grant has been Agricultural Cooperative Development International (ACDI) because of issues concerning funding mechanisms (matching funds). In Ethiopia, OFPEP has been implemented through the African Village Academy (AVA), a local NGO because Winrock is not registered as an NGO. This lead agency function was being transferred to PACT at the time of this study. In Kenya, although Winrock is the lead agency for OFPEP, the program is being implemented through Lagrotech, a local NGO.

Total funding for the five-year Matching Grant is anticipated at a level of \$2,999,350. During the time of this evaluation, Winrock and PVC were negotiating an extension of the grant which would extend to late 1998. It was the understanding of the evaluation team that additional funding would be made available which would provide Winrock with up to two-thirds of OFPEP's annual operating budget. It was also understood that WI would submit a new matching grant proposal to PVC for FY1998.

1.3 Purpose and Methodology of the Evaluation

This final evaluation is a requirement of the USAID cooperative agreement with Winrock. According to the Statement of Work (Annex A), the evaluation was "designed and staffed to produce useful information to USAID, Winrock, the PVO/University Center, other collaborating agencies, other donors and those interested in planning and implementing development programs."

1.4 Evaluation Methodology

The evaluation was carried out in May 1997 by an evaluation team consisting of two external consultants, John Zarafonetis, team leader, and Dr. Naraine Persaud, a soil scientist, and included Dr. Pierre Antoine of Winrock and director of OFPEP, Ms. Mary Lou Surgi, program coordinator for the Center for PVO/University Collaboration in Development, Mrs. Sallie Jones, chief of PVC's

Matching Grants Division, and Ms Mary Liakos, contractor, Matching Grants Division. In each country the team was joined by field staff of Winrock, including the OFPEP country coordinators in the four countries: Mr Alphonse Faye (Senegal), Mr Ben Ekoot (Uganda), Mrs Rose Sigar (Kenya), and Dr Eyasu Mekonnen (Ethiopia). Dr J Moses Onim, OFPEP East Africa coordinator and director of Lagrotech, participated in the evaluation in Uganda, Kenya and Ethiopia.

Prior to the field work in Africa, John Zarafonetis and Sallie Jones attended a three-day briefing at Winrock headquarters in Arkansas. The entire team was involved in the field study in Senegal (May 12-17), after which Drs Persaud and Antoine and John Zarafonetis conducted a field study in Uganda (May 18-22). The three went on to western Kenya for one day, after which Drs Persaud and Antoine departed Africa. John Zarafonetis completed the field portion of OFPEP/Kenya (May 22-25) and Ethiopia (May 26-27) with Dr Onim.

This evaluation is based on interviews with and site visits to OFPEP farmer beneficiaries and lead farmers (trainers), meetings with collaborating organizations including PVOs, local NGOs, farmers' groups and women's groups, meetings with and visits to research and academic institutions, and, in Senegal and Uganda, meetings with the USAID missions.

The short time periods spent in the four countries precluded extensive field site visits, and provided only limited contact time between the evaluation team and the in-country OFPEP teams and their collaborating partners and target communities, making it difficult to appreciate fully the achievements and issues of a program which in some cases has been going on for five years. To maximize its effectiveness in the time available, the team sometimes split to cover more geographic sites and, in Uganda, Kenya and Ethiopia, convened workshops of OFPEP partners and beneficiaries in addition to performing site visits. Throughout the evaluation study, the team attempted to reflect its understanding of the OFPEP methodology by maintaining a transparent and participatory approach. A country-by-country itinerary appears as Annex B and a list of persons contacted for this study as Annex C. Many interviews with local farmers were held in local languages, in which OFPEP staff served as interpreters. Grant agreements, monitoring and evaluation reports, training materials, project proposals and internal studies also were reviewed as part of this assessment. A list of documents consulted appears in Annex D.

This report is divided into three major sections. This first section provides an introduction to and background on the matching grant, as well as the evaluation methodology. Section 2.0 is an institutional assessment of OFPEP, and Section 3.0 examines program impact including specific findings for each OFPEP country program. An executive summary and a summary of evaluation findings and recommendations precede this section.

Section 2 INSTITUTIONAL ASSESSMENT OF OFPEP

2 INSTITUTIONAL ASSESSMENT

This section of the study examines Winrock from an institutional perspective and raises several cross-cutting issues of an organizational nature

2 0 Introduction

NGO assessments are challenging because there is no broadly accepted, easily measurable standard of what constitutes institutional effectiveness. This is particularly true with respect to the non-profit sector, since the success or failure of philanthropic endeavors cannot be measured by a simple bottom line accounting formula, as in the case of profit-making entities. For this reason, non-profits are obliged to spend considerable time and effort defining what constitutes effectiveness in their particular case. Because of the lack of a standard measure, evaluators are frequently forced to conclude that the only fair measure of institutional effectiveness is the demonstrated capacity of the organization to achieve the goals that it has set for itself. The difficulty with this logical but circular line of reasoning is that it does not add to or enrich understanding of what constitutes a healthy, viable development assistance organization. In the final analysis, it is true that non-profits can only be judged fairly against the goals they set for themselves. At the same time there are certain attributes, if not indicators, which appear to enhance the likelihood that an organization will be successful in that endeavor. For the purpose of this study, the evaluation team identified a number of institutional characteristics that were believed to be important in assessing the performance of Winrock.

2 1 Culture, Values and Style of Operation

Winrock's most singular institutional characteristic with regard to OFPEP may be its clear and consistent conception of its mission and the compatibility between that mission and WI's own internal organization.

Although the outcome of more than 40 years of massive international efforts to increase food production in Africa is anything but encouraging, WI has demonstrated that food availability begins at the farmer level, that obstacles to production are many and complex, and that just as food insecurity in Africa did not occur overnight, responses must, likewise, be long-termed. To this point the methodology of OFPEP has been appropriate. With assistance from OFPEP, farmers are identifying problems to production and food security, OFPEP is *introducing* (as opposed to promoting) low-resource technologies as solutions to many of these problems, and farmers are being trained not only to address these obstacles themselves, but also to train other farmers to do the same. The program is participatory and, to a degree, self-perpetuating. Furthermore, by focusing on the small farmer, OFPEP is filling a void left by ineffective government extension services and high-cost, input-driven agriculture development programs.

OFPEP's strong and unifying value structure and its set of shared beliefs about agricultural production appear to have had significant impact on Winrock itself, to the point that it has become the cornerstone of WI's program portfolio and a model for new programs. At the time of this evaluation, WI was implementing or considering launching OFPEP-type activities in a number of other countries including Indonesia, Mali, Tanzania, and Guinea, and OFPEP concepts and passwords such as *demand-driven*, *participation*, and *introducing* rather than *promoting* have become part of the nomenclature of its COO and senior vice president, its development director, its director for agriculture and most of the program office.

Shared values and a high level of commitment appear to be the basis for several institutional attributes

- A marked absence of overt internal conflict. While there are differences of opinion with regard to the future direction of the organization (e.g. private sector funding of rice culture weed control in northern Senegal, consolidating programs in Uganda and Kenya due to budget constraints, and internal resource allocation), the degree of difference appears manageable and resolvable and the nature of the debate seems healthy.
- An exceptional degree of programmatic focus and consistency. OFPEP staff have demonstrated an inclination to do what they know how to do and stick to it.
- An unusual capacity to collect and organize a body of knowledge about agricultural production. The relationship with the PVO/University Center has provided OFPEP with an opportunity to act increasingly as a research laboratory for low-resource, participatory agriculture development.
- A sense of being unique and a pride in being distinctively different from other NGOs. WI staff place considerable emphasis on setting themselves apart from other NGOs with respect to not only what they do but how they do it.
- A capacity to be opportunistic. WI's strong reputation and access to donors and partner agencies have offered opportunities to expand current OFPEP initiatives and consider launching similar activities in other countries.

This strong sense of identity and shared values are institutional attributes that are normally of significant benefit to an organization and, in the case of Winrock, are characteristics which may set WI apart from most other PVOs. At the same time, these strengths have some potentially negative side effects, including difficulty in making changes to enhance impact, a tendency to further centralize decision-making in order to protect established doctrine from invasion, and sacrificing current operations to take advantage of new opportunities in other countries.

The ability to balance between focus and continuity on the one hand and innovation, adaptation and expansion on the other is a difficult dilemma for a non-profit. Change may be particularly

threatening in an organization with strongly-held values and a program and operating style linked to those values. OFPEP is being confronted by change, the capacity to change demands adroit and sensitive leadership.

2.2 Organization and Management

The success of a networked program such as OFPEP depends not only on the technical capability and professional maturity of the program staff, but also on the internal management structure, including the mechanisms for involving, interacting with, and sharing responsibility between OFPEP and all partners in the network. In the short time available in the four OFPEP countries, the evaluation team attempted to address issues of organization and management.

As proposed, OFPEP needs to establish partnerships and linkages in order to create the network needed to carry out its stated purpose. This process occurs simultaneously at the Winrock Headquarters level and at the host country level. Although there is good communication and relations between these levels, it was evident to the evaluation team that decision-making at these two levels may not be entirely harmonized and transparent. This is probably due to the distance factor and the tendency at both levels to make decisions without completely thinking through their full impact on the other level.

This distance effect is exacerbated when the lead agency in the host country is not Winrock International, e.g., ACDI in Uganda. In this case, another link (the lead agency's headquarters management) is added to the communication loop. Shifts in the priorities at the lead agency's headquarters will translate into operational changes in the host country that may be at variance with those of WI (the central coordinating entity for OFPEP). This could result in conflicting signals within OFPEP's operations in the host country and, at worst, a sidelining of OFPEP by the lead agency. This may have occurred with ACDI as the lead agency in Uganda. Unfortunately, the evaluation team was not able to analyze this situation in sufficient detail to permit suggestions for amelioration.

It should be noted that the team did not see these as serious problems during the evaluation, only that they need attention to maintain the desired level of transparency and to avoid the possible effects of the distance factor.

The PVO/University Center plays both a supporting and complementary role to WI in the management of OFPEP. This role appears to have been satisfactorily carried out through coordination of reports, provision of consultants, and training workshops.

The evaluation team observed good communication, involvement and relationships between OFPEP and host country partners such as Peace Corps, World Vision International, Agri Service Ethiopia, Christian Children's Fund, Action Aid, Mobilizing Against Desertification (MAD), the International Center for Research in Agroforestry (ICRAF), Governmental and Non-governmental Organizations, and institutions (for example, Makerere University and KARI - the Kenya Agricultural Research Institute). The workings of these relationships are influenced to

some extent by the historically different administrative traditions (English- or French-based) in the particular host country. In most cases these relationships are informal based on common goals, mutuality, and reciprocal benefits. For the most part, they have been initiated through the visibility, influence, and personal contacts of the Senegal coordinator and the East African coordinator. Nevertheless, there is some merit in formalizing some of these relationships where needed, in order to enhance the stability and continuity of the cooperation as the leadership and personalities change within the country partners.

There is a good deal of direct lateral flow of information between the country programs in Uganda and Kenya because of the proximity of these countries. There is much less direct lateral flow between the other country programs and those of Uganda and Kenya. Information flow between these programs is filtered through the PVO/University Center. The question is whether the benefits of increasing the direct lateral communications through meetings and staff visits would be commensurate with the cost. This may be at least worth discussion, since networks tend to benefit positively from such information exchanges.

The evaluation team found that, to a large extent, the management entities at WI and the PVO/University Center have worked harmoniously in jointly overseeing OFPEP. However, it was noted that the role of the PVO/University Center can be made more effective in the important aspect of testing hypotheses about the OFPEP approach to rural development through focused and systematic monitoring and evaluation of OFPEP impacts. Validation of the OFPEP approach would help not only in strategic planning but also would carry considerable weight in seeking funding for OFPEP activities. The evaluation team did not find much evidence that hypotheses had been developed and tested through a process of systematic data collection and analysis.

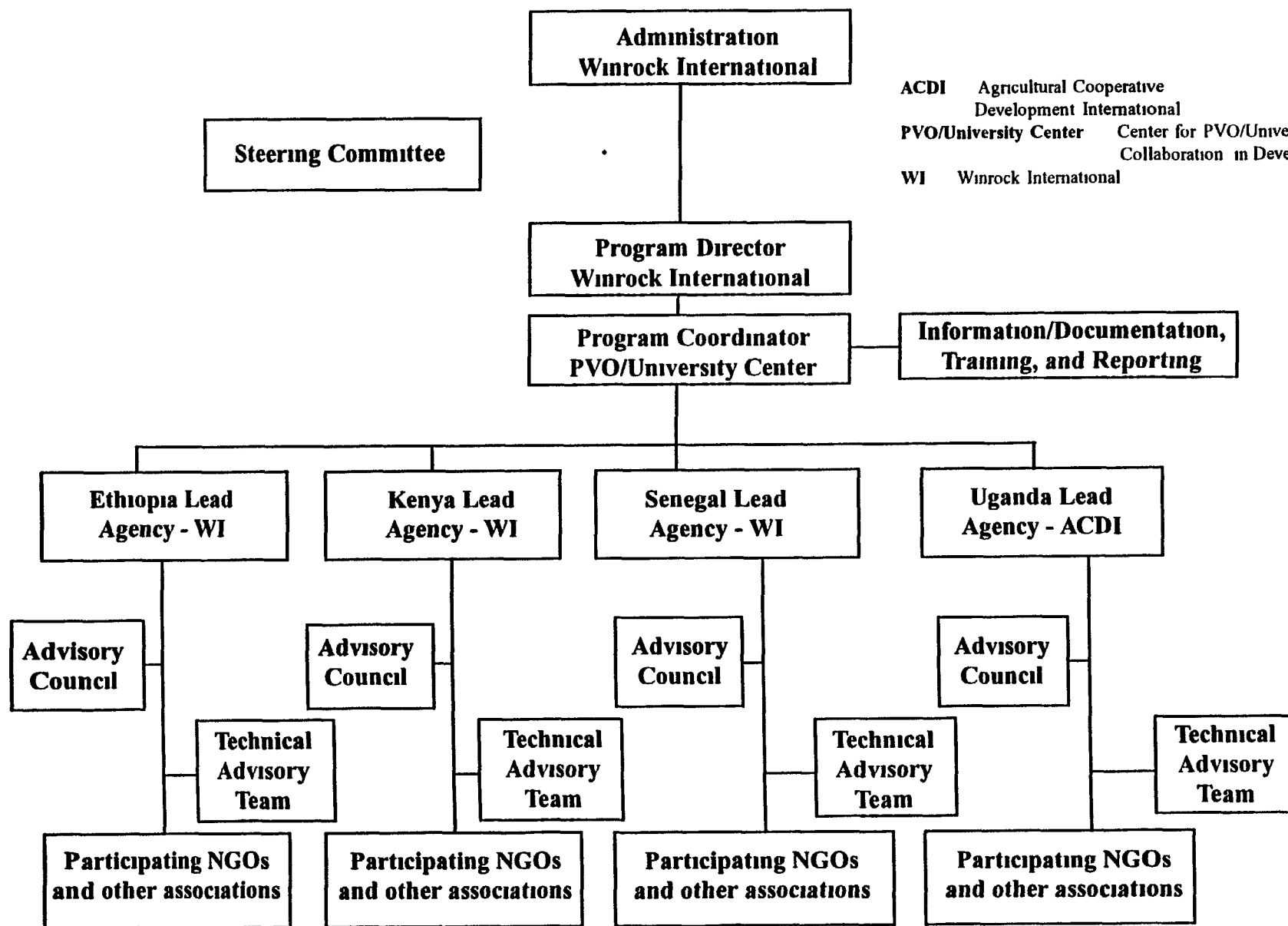
The management responsibility of the country coordinators to ensure implementation of the technical program is much more well-defined and less subject to ambiguities. The evaluation team observed that in general the country coordinators fully understood their roles and have done an excellent job in ensuring the successful impacts of the OFPEP demand-driven approach. It is due to their efforts that OFPEP is recognized as a resource and enjoys a high visibility among the agencies engaged in the rural development in their respective countries. For example, OFPEP West African coordinator, Alphonse Faye, has appeared on the World Net Television program *Africa Journal* and on the CNN program *On the Menu*. Although not directly funded by USAID/Senegal, OFPEP is recognized as an integral part of their strategic objective in agriculture and natural resource management. East African coordinator Moses Onim, together with Ben Ekoot in Uganda and Eyasu Mekonnen in Ethiopia, has built strong relationships with research institutions and has attracted supporting funding for OFPEP in-country activities.

Nevertheless, the evaluation team observed that the overall management has put the excellent work of these country coordinators at risk by trying to expand the OFPEP concept to other countries before the results and impacts have been fully consolidated. To some extent, this is driven by opportunism to build on the visibility and success of OFPEP to attract more funding from more sources. This would be understandable if it did not mean paring the current country programs to set the stage for expansion into other countries.

Figure A

OFPEP Management and Organizational Chart

ACDI Agricultural Cooperative
Development International
PVO/University Center Center for PVO/University
Collaboration in Development
WI Winrock International



An effort has been made to devote staffing resources to the field. At the time of the evaluation, 27 of 29 OFPEP staff were in the field.

Program management responsibilities are shared by WI, the PVO/University Center and host country coordinators. Implementation of the program is managed out of Winrock headquarters by the OFPEP coordinator and an administrative assistant. (See organizational chart.) A collaborative and complementary role is played by the PVO/University Center, which provides input in the areas of communications, linkages and information-sharing. As OFPEP has grown to include more countries and impact more farmers, the Center has placed increased emphasis on coordinating country monitoring and evaluation reports. During the life of the program, the Center staff working with OFPEP has consisted of a part-time program coordinator and a part-time Information and communications specialist based at the Center headquarters in Cullowhee, NC and a full-time process and linkages specialist based in Dakar, Senegal.

2.3 Communications

While it is hazardous to draw conclusions on the basis of short visits to headquarters and to the four countries in which OFPEP is operating, the following impressions emerged:

- The level of tension between headquarters and the field and between WI and the lead agencies is within the range of normality. As would be expected, older, more mature country programs desire a greater degree of operating autonomy than newer, start-up efforts.
- Few, if any, complaints were made regarding the level and quality of support from headquarters.
- Funding and resource allocation decisions tend to be centralized in Morrilton. While the field recognizes that there is a clear need for headquarters to actively seek funding to support OFPEP, there appears to be a perception by some OFPEP field staff that they are insufficiently involved in this process. Some feel that these decisions are made in isolation from them and funding decisions are presented to them as *fait accompli*. Whether real or perceived, this leaves room for misinterpretation. The full implication of funding and how OFPEP resources are allocated needs to follow the same participatory principles that OFPEP follows with its implementing partners and farmers, i.e., allowing for needs to be identified and consequences reviewed, and, above all, discussed openly. In response to these concerns it would appear that OFPEP country coordinators, or at least East and West Africa regional coordinators, could be brought into headquarters more frequently for consultation or better yet, they should become regular members of the U.S. steering committee.

- Field staff appear content and comfortable with current reporting requirements
- Policy and program guidance disseminates efficiently down through the organization and appears to effectively influence program design. As stated elsewhere, OFPEP is characterized by program and policy cohesiveness. Language and approach are similar from country to country
- Aside from annual budgets, OFPEP country programs in the past have not prepared strategic multi-year plans linked either thematically to WI's central strategic plan or programmatically to the country context in which they are operating. The evaluation team believes that planning at the OFPEP country level needs to be strengthened and expanded. This is particularly true with respect to the development of a fund-raising plan and a more precise definition for each country program of what constitutes a critical mass of competence in the field at different stages of development
- Planning and policy are becoming increasingly important as OFPEP becomes more complex. There would appear to be several institutional choices that will have to be faced, and the OFPEP model, because it is responsive, will need to be constantly adjusted and updated. Over the course of the current Matching Grant, most planning and policy decisions have been made at Morrilton and passed to the field programs. This has worked because OFPEP is small enough to allow two-way flow of communication and the country programs are also small and largely formative. This may not work in the future as the country programs become more mature and sophisticated and the OFPEP program director, who has other WI responsibilities and is only working on OFPEP part-time, may be drawn more and more to his other (non-OPEP) work

2.4 Focus and Clarity of Mission

As is repeatedly stressed in this report, WI, through OFPEP, prides itself on its sharp focus, i.e., its clear idea of what it does and why it does it, and the systematic working out of the operational and programmatic implications of that basic mission. However, a narrow and undeviating focus also has certain disadvantages. Primary among these disadvantages is that too rigid a conception of mission may inhibit innovative thinking and may make an organization less able to adapt to changing circumstances and internal tensions.

The difficulty for any non-profit is to balance between focus and self-discipline on the one hand and adaptation and flexibility on the other.

Although OFPEP has sustained the clarity of mission, within WI there nevertheless appears to be some struggling with program issues and trade-offs involving the constituent elements of OFPEP's

basic mission The following questions were posed by staff both in the home office and in the field during the course of conversations with the evaluators

- How should the term *poor small farmer* be defined? How can OFPEP help these farmers move from mere subsistence to commercial farming when these same farmers lack access to sufficient capital to allow them to purchase inputs needed to push them over the hump of subsistence?
- How can OFPEP maintain its *participatory* and *demand-driven* methodology in areas where other development organizations are promoting high-resource, result-oriented development?
- Why emphasize low-resource agriculture when, in some cases, the strategic infusion of inputs may be a more cost-efficient way to increase production?
- At what point does the OFPEP approach become over saturated since the technologies introduced by OFPEP are low-resource and labor-intensive? At what point does OFPEP country staff become overextended?
- What constitutes critical mass for OFPEP? In other words, when is there a staff, program and mix of professional competence of sufficient size to become self-sustaining?
- At what point does a district, a region or a country have sufficient introduction to OFPEP technologies so that OFPEP can leave and apply its resources elsewhere?

These questions reflect inherent, fundamental and continuing dilemmas that will not be resolved through issuance of policy directives or adoption of better procedures The issue for WI is not to provide definitive answers to these questions, but to put in place a process for dealing with them on a regular and continual basis Winrock deserves considerable credit for establishing the steering committee and in-country advisory committees, but these committees have not provided sufficient operational roles to deal with these and similar questions Moreover, the steering committee has not had the regular participation of OFPEP country coordinators On balance, the evaluation team believes that WI needs to put additional emphasis on these committees for the purposes of discussion and decision-making

2.5 Staffing and Staff Training

The evaluation team was impressed by the quality of OFPEP country staff in each of four countries visited, as well as by those associated with OFPEP at Winrock headquarters and the PVO/University Center

Morale appears to be generally good and the working atmosphere in Morrilton and in the field is serious and professional. There appears to be a strong sense of loyalty to OFPEP, pride in its achievements, and commitment to its purpose and methodology. While there may be disagreement with the way that WI or OFPEP can improve, there is virtual staff consensus that OFPEP is the most appropriate agricultural program for their respective country environments.

In the field, salaries and working conditions vary from country program to country program. Among the inequalities is transport. Unlike Uganda and Senegal, which have project vehicles and provide means of transport for OFPEP extension agents, staff in Kenya and Ethiopia must depend on unreliable public transportation, hitching rides with partner organizations if they are going the same way, or visiting distant projects on-foot. Despite the transport problems, staff in all four countries are well-known at the village level, and the team heard numerous sincere expressions of appreciation of their efforts by grateful farmers and their families.

As observed elsewhere in this report, the request-driven nature of OFPEP has resulted in some cases, and may eventually result in all cases, in an overextended, diluted program. Partially because of OFPEP's success, staff are working with more and more farmers' groups and NGOs, in more widespread geographic areas with more crops and technologies. Demand on them to provide training and follow-up has grown exponentially, and the individual needs of farmers and groups are becoming increasingly different, if not complex, depending on the technologies adopted. Moreover, in some instances, OFPEP staff are being asked to facilitate credit for groups, in others they are helping to train government extension workers, and in a few instances their skills and knowledge are at risk of being surpassed by lead farmers.

It appeared to the evaluation team that more effort must be made to ensure that staff knowledge of the technologies that they are being called on to introduce is regularly upgraded and that the capacity of the OFPEP staff to train groups and farmers be enhanced by training in new and alternative training methodologies. Although the evaluation team is not sufficiently aware of new training pedagogies, it would appear that all OFPEP staff would benefit from advanced versions of TOT, other adult learning/training methodologies and more PRA.

2.6 Financial Management

WI has several funders which also holds true for OFPEP. In Senegal alone, the program has five separate sources of funding.

Although a review of the financial management system and procedures is beyond the scope of this study, the team was impressed by the care and professionalism devoted to financial affairs. According to the USAID chief of the Matching Grants Program, reporting to USAID is timely and accurate.

During the course of the Matching Grant, Winrock has made strides to diversify the OFPEP funding base. Although still highly dependent on USAID, support for OFPEP or OFPEP-related activities has been leveraged from Monsanto, the West African Rice Development Association (WARDA) and USAID Natural Resource Based Agricultural Research (NRBAR), USAID/HRD and USDA in Senegal, COOPIBO, a Belgian NGO, in Uganda, and the Food Industry Crusade Against Hunger (FICAH) in Kenya. At the time of this evaluation study, WI was negotiating monetization programs in Kenya and West Africa, both of which could support OFPEP activities. Moreover, other USAID funding is anticipated and would include funding from the mission in Addis Ababa for an OFPEP-type integrated agricultural/women's leadership training program which would benefit OFPEP.

At a broader level, Winrock International is developing a fundraising program that it expects will generate a substantial level of additional revenue. This strategy includes securing larger annual gifts, increasing WI's present endowment by fifty percent, creating new program support endowments, and improving management of WI's investment portfolio.

While commending the progress WI/OFPEP has made to diversify, the evaluation team believes that more could be done to develop a creative and effective long range funding and program strategy that would help diversify further the funding base. This might include:

- Preparation of detailed long-range country-specific funding strategies that would set forth a gradually declining dependence on USAID sources and that would be broadly disseminated throughout OFPEP.
- Increased efforts to make overseas staff more aware of the diversification issue, and provision of training in fund raising for country coordinators.
- More thorough consideration of the long-term significance of private sector support for OFPEP. While the team agrees that Monsanto presents an interesting opportunity for needed support for the Senegal program, and the herbicide, glyphosate (known commercially as Round-Up) appears to be a harmless solution to the weed control problem, this relationship represents uncharted territory for OFPEP on at least two fronts. First, OFPEP may be crossing the fine line between introduction and promotion of technologies and, contrary to its low-resource emphasis, is demonstrating a higher-end input. Second, Monsanto's underlying agenda is profit-oriented. The team believes that, although there is reason to be optimistic about this relationship, it merits caution and strict attention to ensure that OFPEP basic methodology is not compromised.

2.7 Monitoring and Evaluation

On the whole, the team was favorably impressed with OFPEP's internal monitoring and evaluation system, the importance that the organization places on data collection, and the seriousness with which it reviews the data. The team was especially impressed by Winrock's emphasis on deriving lessons from the OFPEP experience. This occupation with lessons learned was apparent in all OFPEP countries. A summary of lessons learned presented to the evaluators by WI is included in this report in Annex E.

Although there was not sufficient time in-country for the team to look deeply into OFPEP data collection systems, random sampling showed that OFPEP activities were being carefully documented. Baseline information on both soil management and improved seed varieties was available, as were farmer surveys, training reports, and special studies on gender, weed control activities, and efforts to determine program impact. It appeared to the team that OFPEP is collecting the proper information and probably in the proper amount to permit analysis.

One inherent weakness in OFPEP's monitoring system, however, is the reliance on partner organizations for reporting. The evaluation team heard many complaints from OFPEP staff regarding problems in timeliness in reporting and accuracy of the information collected as few groups have sufficient capacity in this area. Furthermore, for those few groups which do have the capacity such as the Peace Corps in Senegal, information collection and reporting are not given the interest or priority desired, i.e., Peace Corps volunteers would prefer to spend their two-year assignments teaching people to grow rice rather than collecting data. It would appear that one way to address this deficiency would be through formalizing the relationships between OFPEP and its implementing partners in an agreement where expectations and responsibilities, including data gathering and reporting, are clearly spelled out.

Much of the credit for OFPEP's monitoring and evaluation system belongs to the PVO/University Center. In addition to organizing OFPEP reporting and disseminating information on OFPEP activities, the Center redesigned the system and organized evaluation training following the mid-term evaluation. In February 1996, WI and the Center organized an OFPEP workshop held in Kisumu, Kenya. Numerous evaluation issues were discussed, and countries developed more complete evaluation strategies. Among the issues was a review of country strategies to ensure that OFPEP was sufficiently addressing the needs of women farmers. A follow-up workshop or evaluation for OFPEP/Kenya and Uganda was held in May 1996.

The team found one monitoring tool especially inspired and worth noting. At the May 1996 workshop, the Center introduced photography as a documentation and evaluation tool to several farmers' groups. Farmers' groups were given automatic disposable cameras and asked to portray their experience with OFPEP. The groups went back to their communities, took pictures, and submitted them to the Center, which published a brochure entitled *Through Farmers' Eyes*. The publication presented an interesting and participatory perspective of obstacles and solutions to production.

Because of differences in OFPEP operations in the four countries, different techniques for monitoring project activities and impacts are being developed. In Senegal, monitoring is coordinated by a process and linkages specialist (hired through the PVO/University Center) who works with the technical staff. She has initiated several independent studies, including an examination of impact of the OFPEP/Peace Corps rice projects, a study of composting activities and a gender study.

In response to the mid-term evaluation, a sample farmer survey was developed for OFPEP in Kenya and Uganda, where a group of farmers are being tracked to measure program impact. OFPEP/Kenya is also using university students to collect impact data.

To supplement the progress made in monitoring and evaluation, the team identified two other areas in need of strengthening:

- 1) While OFPEP's monitoring system appears to be appropriate for purposes of reporting on the Matching Grant, in order to attract other donors it appears that the Center could help develop other ways to more effectively capture the achievements of the program. Ideas such as *Through Farmers Eyes*, the Kenya impact studies, and a study of how OFPEP has reduced the length of the *hungry season* in Baback, Senegal (OFPEP Fourth Annual Report) are excellent and need to be amplified. Reporting on outputs such as number of demonstration plots and number of farmers attending training, while important, needs to be supplemented by indicators documenting how OFPEP has improved the daily lives of farmers and their families.
- 2) As noted elsewhere in this report, little has been done to validate the OFPEP approach. While logic and anecdotal evidence support the concept of a farmer-requested (demand-driven), participatory approach, there has been little, if any, analysis of the approach. This appears to be an appropriate role for the PVO/University Center, i.e., testing the hypothesis about the OFPEP approach to agricultural development. Validation would help with strategic planning and day-to-day program management, and would strengthen funding requests.

2.8 Matching Grant Extension

As indicated in Section 1.0, PVC is in the process of extending the current Matching Grant through late 1998. This extension, which will be at a reduced level, will enable OFPEP to operate through two additional agricultural seasons in the four countries. Indications at the time of this study were that funding for the extension would be at the level of approximately two-thirds of OFPEP's average annual budget. Both PVC and Winrock anticipate a request for a new Matching Grant to be submitted for 1998.

The evaluation team was asked to provide guidance for the extension and offers the following suggestions for Project Year Six:

- 1) OFPEP should be continued with an eye towards laying a stronger institutional foundation for a new Matching Grant. This would include development of in-country strategic plans, staff training (especially in new and alternative training methodologies), and the development of an added capacity to deliver or facilitate the delivery of training in non-production technologies such as credit, post-harvest storage, and marketing.
- 2) Although patently obvious, OFPEP should aggressively pursue funding from complementary sources, such as the USAID mission-funded EMPOWER project in Ethiopia. Less clear is what to do in Uganda where signals regarding future PL-480 support are murky if not discouraging.
- 3) In Kenya and Uganda, where OFPEP is working through many partners and staff are involved more in direct training and follow-up than is the case in Senegal and Ethiopia, OFPEP could consider consolidating its activities to one or two geographic zones (districts).
- 4) The role of the PVO/University Center should be expanded so that it may spend the transition year developing a system designed to validate the OFPEP approach and better capture the achievements of OFPEP for the purposes of planning any new phase (the next matching grant) and approaching possible donors.

2 9 Implications of Growth

By any measure, Winrock is a successful organization growing at an impressive rate while maintaining focus and concentration. For Winrock, an important question is not whether growth will continue, but what shape it will take. The team identified six areas where WI can allocate incremental resources to OFPEP to increase its level of activity and effort.

- 1) A quantitative increase in the number of field programs, either through OFPEP or, depending on funding options, under the aegis of other WI initiatives such as EMPOWER and RADORT
- 2) A qualitative increase in the size of current OFPEP programs, presumably through added staff and more staff training
- 3) Expanding OFPEP linkages with national and regional research institutions through more and more formalized efforts to test and provide data/feedback on new production technologies
- 4) Expanding OFPEP's menu to include not only production technologies, but also pre-production and post-production technologies requested by OFPEP farmers such as credit, integrated pest management, post-harvest storage and marketing
- 5) Expanding OFPEP's approach to include the introduction of small machinery such as seeders in areas where farmers have the potential to move from mere subsistence farming to small-scale commercial production
- 6) In countries where OFPEP enjoys government access and where the political environment allows for it, expanding OFPEP's role to participate in a policy dialogue on agricultural production in order to create a climate more favorable to small farmers

Care must be taken to avoid initiating OFPEP in new countries before existing programs have obtained sufficient funding and reached adequate staffing levels. Precisely where any incremental funding should go is probably a difficult judgment call, but it was the impression of the evaluation team that, if new countries were to be added, both Mali and Guinea could be effectively absorbed and added to the portfolio of the Senegal country coordinator, who could then serve as West African coordinator. For the short term, however, the team felt that any incremental funding should go toward strengthening existing programs.

While this assessment is not sufficiently long or profound to allow the evaluation team to prescribe a growth path for OFPEP, its findings suggest two additional thoughts.

- 1) WI's strategy should concentrate on forming and continuing partnerships with mature rather than nascent NGOs, CBOs and farmers' groups because of budget and

staffing limitations, and to help ensure better training and reporting with less need to provide direct follow-up

- 2) OFPEP country programs should prepare long-range strategic plans, which could be integrated into a central OFPEP plan. These plans would include institutional capacity goals leading to an exit strategy where OFPEP is either turned over to a local organization or its roles and functions are divided among a number of groups to be carried on once OFPEP ends

Section 3 INSTITUTIONAL AND FARMER IMPACTS

3 INSTITUTIONAL AND FARMER IMPACTS

This section presents the evaluation team's assessment of the impact of OFPEP activities in the four program countries (Senegal, Uganda, Kenya and Ethiopia). The team focused on two categories of impacts: institutional and farmer.

3.1 Institutional Impacts

OFPEP's participatory and demand-driven approach depends on linkages with a variety of organizations, ranging from national research institutions and international PVOs to less sophisticated local grassroots groups. Rather than implementing project activities alone, OFPEP operates as a liaison or broker between community groups, NGOs, PVOs and research institutions that provide training and information about tested techniques to address soil fertility and improve crop production. At the time of this study, more than sixty organizations were participating in OFPEP in the four countries.

3.1.1 Strengths of the Collaborative Approach

Although initially dubious of a model so highly dependent on collaboration with many groups, the evaluation team concluded that the chosen approach was best for the program for the following reasons:

- The limited number of OFPEP field staff (27 for four countries) is far too small for OFPEP to provide direct extension services at a level of sufficient impact.
- Despite cutbacks in foreign assistance for African agriculture and food systems, there are hundreds of organizations involved in the agricultural sector in ancillary if not primary ways. Many of these groups have track records in working in rural areas, and have internal systems including field agents and transport to support their work.
- The participatory, needs-based OFPEP approach is consistent with the values of many PVOs and NGOs. Most PVOs have concluded by now that keys to their program success are skill-transference and capacity building, rather than provision of direct services.
- For a variety of reasons, there has been a proliferation of local, largely democratic self-help organizations, including farmers' groups, in Africa. This is occurring in the four OFPEP countries, and OFPEP's participatory approach is consistent with that of many of these groups. More groups are being established all of the time, and existing groups are growing in number and area served.

- Although many organizations are implementing agricultural and rural development activities, most of them do not have resident technical expertise. By offering training and technical support to PVO/NGO staff, OFPEP increases the capacity of these organizations to carry out their work more effectively and to have positive impact.
- OFPEP by nature is a finite program dependent on donor support. Working with international organizations that will have a long-term presence in-country (Peace Corps, CCF, etc.), or through indigenous groups, which are more permanent, offers an opportunity to sustain and perpetuate OFPEP methods and its approach to introduce new technologies.
- OFPEP is able to work with women's groups, who normally may not have access to technical support.
- For a variety of reasons research institutions, as evidenced by discussions with ISRA in Senegal and Namulunge in Uganda, do not have sufficient contact with the farmers whom the benefits of their research are supposed to reach. These institutions recognize that OFPEP offers an opportunity to fill this void by acting as a liaison between them.

3.1.2 Challenges in the Approach

The team also identified some challenges in OFPEP's collaborative/linkage approach.

- Both OFPEP's implementing partners (PVOs, NGOs and grassroots groups) and technical partners (research institutions) have agendas, if not missions, that are outside OFPEP's goals. These groups may be concerned with additional social and economic development programs such as health or enterprise development, as in the case of CCF in all four countries, African Village Academy (AVA) in Ethiopia, and CARE/Kenya. They may have social or advocacy agendas, as do most women's groups, or additional non-development goals, such as the Peace Corps, which values cross-cultural exchanges. Technical institutions may have research emphases outside OFPEP's interests. Few groups, if any, are in total harmony with OFPEP.
- The relative capacities of implementing partners vary greatly, as do the requirements and pressures on OFPEP staff to train and assist them. There is a difference between working with an established PVO with trained staff and established modes of operation, and a nascent grassroots group with little experience.
- A major deficiency of grassroots groups, NGOs and PVOs is in reporting. Data collection and analysis are pivotal to the success of OFPEP.

- Each implementing partner has unique institutional characteristics and needs, necessitating a partner-specific approach from OFPEP. In Uganda, for example, OFPEP is working with a number of local farmers' groups located in remote areas. Communication with these groups is not easy and, as these groups lack transport, it falls on the OFPEP extension staff to provide most of the training and follow-up in a hands-on fashion. In Senegal, where OFPEP relies heavily on Peace Corps, staff must structure its program into two-year volunteer assignments, accounting for time for a new volunteer to adjust and develop local language capacity. The fact that there cannot be fully-standardized approaches for working with partners means that OFPEP staff is devoting considerable time to planning and working individually with these groups.
- Most of the organizations with which OFPEP is working are personality-driven and may be susceptible to staff turn-over or, alternatively, good and bad management, over-zealousness, inflexibility or internal politics.

3 1 3 Selection of Partners

In each country, OFPEP has been opportunistic and, for the most part, inspired in its selection of implementing partners.

In Senegal, OFPEP has built on the experience of the On-farm Seed Project and continues to capitalize on a large Peace Corps agricultural program that offers a continuous supply of an average of 40 or more trained and supported volunteers in two regions of the country. OFPEP has also worked or is working through Christian Children's Fund (CCF) and World Vision International (WVI), two groups that also cover large geographic regions of the country and which have substantial resources of their own to implement the program.

In Uganda, OFPEP works in three districts through more than 30 organizations. For the most part, these groups are either farmers' groups or consortia of farmers' groups. In addition, OFPEP/Uganda has partnered with COOPIBO, a Belgian NGO which funded activities related to rapid multiplication and distribution of disease-resistant cassava varieties, and the Joint Energy and Environment Projects (JEEP) through which OFPEP initiated an improved cookstove project as well as a gender study.

In Kenya, OFPEP has linked itself strategically not only to PVOs such as CARE/Kenya and CCF, but to a network of church groups which are among the most active CBOs in western Kenya. Through OFPEP's East Africa Coordinator, OFPEP/Kenya and Uganda enjoy access to research and academic institutions. OFPEP/Kenya has also hosted university students on a number of occasions, offering the students opportunities to conduct field work and benefiting from the students' research.

Although it is in an early stage, OFPEP/Ethiopia has been similarly opportunistic in its selection of implementing partners. Given the special climate in which NGOs are operating in Ethiopia, OFPEP has been strategic in its selections, partnering with CCF as well as with two local NGOs, Agri Services Ethiopia and African Village Academy. All are relatively secure in this NGO environment, appear to meet the government's current, although nebulous, registration requirements and have emphases on improving agricultural production. The groups are working in three discrete geographic regions, offering opportunities for OFPEP to work in a number of ecologies.

3 1 4 Upstream-Downstream Linkages

The following chart (provided by OFPEP) illustrates the opportunities created by OFPEP linkages

DOWNSTREAM LINKAGES		UPSTREAM
Opportunities for farmers	Opportunities for NGOs and community groups	Opportunities for researchers
To share their wealth of knowledge with others in the network	To share their knowledge and experience with researchers and other farmers	To learn more about the reality farmers face and the constraints with which they cope
To participate in setting the agenda for a program addressing their needs	To bring proven technologies to communities with whom they are involved	To conduct research with greater relevancy to farmers' needs
To improve the productivity of their farms	To learn more about participatory research and development	To extend their proven technologies to greater numbers of farmers
To explore new sources for seeds and inputs	To exchange information with other organizations and agencies	To access other researchers around the world working on problems of mutual interest
To improve their families' quality of life	To link up with other collaborators in the network to expand programs of their own	To use the technical assistance network offered by OFPEP
		To participate in training sessions

It was apparent to the evaluators that OFPEP has done much better in working with *downstream* linkages (i.e. farmers and implementing partners) than it has with *upstream* entities (research and academic institutions). The team concluded that this was due to the following reasons:

- There has been a tendency or preference of OFPEP staff to work in the field "where the action is". Although this is understandable, and staff most likely derive a greater level of satisfaction working with farmers than in meeting in an office with researchers, this is not mitigating.
- Much of the field concentration of the OFPEP staff results from requests for training and other assistance from OFPEP implementing partners. Staff are working with too many groups, with too many technologies, in geographic areas that are too widespread. They are, for the most part, over-stretched and have no time remaining for liaison activities with upstream institutions.
- Only OFPEP country and regional coordinators appear to have access to and are comfortable with working with the research institutions.

- Based on its limited contact with representatives of the research institutions in three of the four OFPEP countries (no research facilities were visited in Ethiopia), the team had a sense that although interest in OFPEP was fairly acute, few institutions were especially knowledgeable about specific OFPEP activities even though OFPEP had been regularly submitting reports to them

It would appear that in addition to suggesting that OFPEP devote more time to coordinating its activities with the relevant research institutions, as was intended in the original OFPEP proposal, OFPEP should take action to better balance its activities so that it may be a more effective liaison between the field and the institutions. It is suggested that in order to do this, OFPEP should

- 1) consolidate its program activities to fewer groups and lesser geographic areas, and
- 2) focus on more mature organizations that have demonstrated some capacity to train and support their members and meet program reporting requirements

3.2 Framework for Assessing the Farmer Impacts

The goal of OFPEP is to improve nutrition, income and well-being of the smallholder farmers in the target communities. OFPEP proposed (OFPEP, 1992) that the immediate step towards this goal is to improve agricultural productivity through introduction and adoption of appropriate and sustainable improved seed and soil fertility technologies. There is no question that seed availability and accessibility and soil fertility degradation severely constrain the productivity of smallholder farmers in the four host countries (and indeed in many other sub-Saharan African countries). What is not so clear are the conditions in a specific community that disable these farmers from overcoming these constraints. There are many ideas and opinions on this question.

OFPEP has suggested (OFPEP, 1992) that the foremost disabling condition is the lack of a mechanism for continual delivery of appropriate information to these farmers. The OFPEP hypothesis is that if these farmers are continually exposed to new ideas and knowledge through some process of self-learning and discovery, then a lasting, albeit slow, transformation will occur.

- 1) in the farmers level of awareness and understanding of their natural production environment, and
- 2) in the farmers ability and capacity to use their collective knowledge to analyze their problems and to seek and make the needed changes in their production practices

Such change in the knowledge, skills and attitudes in target communities is seen as a prerequisite for continual improvements in their food production practices, in the rational use of their natural resources and in their lives and living conditions.

Operationally, OFPEP envisaged that this awareness building and training activity would be implemented through a reciprocal and participatory process of learning and discovery between trainers and farmers in the target communities. Reciprocity in the process is deemed essential, since trainers are effective to the degree that they themselves understand the production systems and socio-cultural dynamics in the target communities. This, however, requires building a high degree of trust and credibility between trainers and the target communities.

OFPEP uses on-farm, farmer-implemented and -managed (FIFM) demonstrations as a focal point in their introduction of new knowledge and technology on seeds for staple food crops and for restoration and maintenance of soil fertility to the target communities. The specific food crops and soil fertility management practices are determined by farmer demand, subsequent to a systematic step-by-step participatory evolution of ideas and decision making within the target communities.

The foregoing assumptions and concepts and operational approaches of OFPEP are neither proven nor established. This by itself makes OFPEP in one sense a large case study in social transformation in smallholder farming communities. This viewpoint has far-reaching implications for the design of monitoring and evaluation components within OFPEP. For example, there would be considerable merit in identifying internal and external factors that determine the rate of adoption of introduced technologies, and in measuring changes in knowledge and attitudes of target communities as a result of OFPEP training activities.

The farmer impacts of OFPEP should therefore be assessed within this contextual framework. The evaluation team attempted to assess

- 1) the extent to which OFPEP has enabled smallholder farmers to increase production, household incomes and food security, and
- 2) the extent to which communities and individuals (especially women) have become empowered and have increased their ability, capacity and self-reliance to tackle their problems individually and collectively

3.2.1 Technologies Introduced by OFPEP

Table 1 provides an overview of the range of technologies introduced in the four host countries. The tabulation may not be exhaustive, but it illustrates the wide range of technologies involved. To some extent this diversity is natural, since the four host countries have important agro-ecological and socio-economic differences. However, smallholder farmers in these countries share common problems. For example, the following appear to be common to all OFPEP host countries.

- soil fertility degradation
- poor availability of viable seeds of improved varieties
- low household cash resources and low household food security
- increasing population density and land pressure
- lack of credit
- lack of organized markets for surplus production
- labor intensive production practices

In the context of appropriateness and sustainability, in general, the technologies selected for demonstration should

- require labor inputs only to the extent that this does not disrupt unduly the daily and annual calendar of operations in the target community,
- be compatible with the traditional production patterns in the target community,
- be based on known facts or research results, and
- have a high probability to increase yield, generate income, and reduce risk and food insecurity in the target community

The technologies listed in Table 1 are most certainly in line with OFPEP's purpose. They would vary in their potential to increase household food security and nutrition and in their impact on women.

Table 1 Technologies introduced by OFPEP in target rural communities in the four host countries over the indicated duration of activities

Category	Technology	Senegal 93-97	Uganda 92-97	Kenya 94-97	Ethiopia 95-97
Prdtion of Seeds of Improved Varieties	Rice	x	x		
	Millet	x	x		
	Sorghum	x	x	x	
	Maize		x	x	
	Soya beans		x	x	
	Groundnut	x	x	x	
	ACMV resistant cassava cuttings		x	x	
	Food beans		x	x	x
	Banana		x		
	Cowpeas	x			
	Teff				x
	Wheat				x
	Barley				x
	Sweet Potatoes				x
Soil Fertility	Compost making	x	x		x
	Crop residue and animal manures		x	x	x
	Rhizobium inoculation		x	x	
	Green manure		x	x	x
	Alley cropping with Calliandra, Leucaena, Sesbania		x	x	
	Chemical NPK fertilizers	x	x	x	x
	Crop rotation cassava-millet	x			
Soil Conservation	Grass strips (elephant grass)		x		
	Live fences	x		x	x
	Terraces		x	x	x
	Row planting	x	x	x	x
	Contour ploughing, ridging, and planting			x	
	Anti-salt bunds against salt water intrusion in rice paddies	x			
Energy Conservation	Firewood efficient stoves, food warmers (magic basket)		x	x	x
Crop Utilization	Soya bean processing		x	x	
	Post harvest grain storage		x		
Small Ruminants	Dual Purpose Goats			x	
Pests, Weed, and Disease Control	Use of glyphosate for red rice control and other weeds	x			x

Table 2 Some positive farmer level impacts of technologies introduced by OFPEP in target communities in the 4 host countries

Technology Category	Impacts of Technology
Production of Improved Seed	Higher yields of staple food crops (rice, cassava, beans, maize, millet)
	Availability of quality (high germination) seeds
	Better crop stands
	Improved household food security
	Crop diversification
	Disease resistance
	Reduced seeding rate for row planted varieties
	Row planted varieties easier to weed
Soil Fertility	Higher yields (double and triple)
	Generated need for commercial fertilizers
	Availability of Rhizobium inoculum
	More labor for compost making
Soil Conservation	Fodder for animals from grass strips
	Availability of mulching materials
	Improved understanding of importance of soil resource
	More labor to construct bunds
	Anti-salt bunds against salt water intrusion in rice paddies
Energy Conservation	Improved stoves saves time and labor to gather wood
	Trees saved
	Better health for women inhaling less smoke from open fires
Crop Utilization	Better nutrition (soya bean milk and other products)
	Improved food security
	Income generation

3 2 2 Overall Impact of OFPEP in Target Communities

The evaluation team found

- Ample documented and anecdotal evidence that OFPEP's technology introduction activities (both directly and through their collaborating partners) have produced an overall positive impact on the lives and well-being of the targeted farming communities in all four host countries Table 2 lists some of the farmer-level impacts stated during the evaluation team's discussions with individual farmers and farmer group leaders in Senegal
- Ample evidence of involvement of women and women's groups in OFPEP demonstrations and training activities
- OFPEP and its partners are well-recognized as a source (in some cases the only source) of information on technologies to target communities
- The FIFM demonstrations of OFPEP stand out as the most effective means of introducing knowledge and technology to the target communities Among its benefits stated during discussions were that it
 - 1 provides a means to involve farmers in participatory learning and discovery,
 - 2 provides farmers the options from which they can choose,
 - 3 serves as a focal point for communication and discussion, and
 - 4 accelerates the rate of adoption since it allows farmers to evaluate the technologies in other farmers' fields
- Through informal contacts between individual farmers and farmers' groups, the technologies introduced in target communities have spread to other communities It is estimated that this ripple or multiplier effect could be as high as 1 to 3 for the rice program in the Niore and Kolda areas of Senegal

3 2 3 Limitations of the Demand-Driven Approach

The evaluation team found that the demand-driven, participatory approach induces a sense of obligation on the part of trainers to respond to expressed needs of the target communities There is a tendency in all four host countries to adhere too strictly to the demand-driven precept to the extent that the variety of technologies and the extent of the target communities have grown, and now exceed the resources of the OFPEP teams in all four host countries to effectively and efficiently perform their supporting functions

Although willingness to respond to farmer needs reflects well on the enthusiasm and dedication of the in-country OFPEP teams and collaborating partners, there is a definite limit to OFPEP's

capacity to continually expand in order to satisfy the myriad needs for rural development in the target communities. An uncontrolled, reactive response to demands from collaborating partners and farmers' groups can quickly lead to over-extension of organizational capacity and a decrease in the quality of OFPEP activities and services.

Once a technology is adopted it automatically generates the need for further technological change. This ever-increasing growth in the demand for technological change constitutes a technological spiral. It presents a further limitation to the demand-driven precept of OFPEP. Thus, compost making in dry areas necessitates water storage technologies to keep the compost moist, and carts and draught animals to transport the bulky materials to the fields.

There are many other such examples of the upward technology spiral. As improved varieties are introduced and adopted, they generate the need for technologies to improve soil fertility and control pest and disease control in order to realize their full potential. Keeping the improved seeds from season to season requires storage technologies and germination tests to determine viability. The adoption of monoculture row cropping for beans, maize and millet in Ninja and Tororo sub-districts of Uganda facilitates intercultivation for weed control but induces the need for better hand-weeders. Monoculture, because it is less resistant, induces a higher incidence of pests and diseases and the need for their control (for example, the appearance of seed-borne anthracnose in beans at OFPEP sites at Magamaga in Uganda).

As production exceeds the subsistence needs, markets for the surplus production become necessary. Alternately, the surplus results in the need for post-harvest processing and preservation of the harvest for later use, or for adding value for higher market prices. Similarly, the adoption of soya beans as a food crop necessitates intermediate cottage-level food processing technology. In short, technological adoption, once begun, becomes an ever-evolving process feeding on itself and generating the continuous need for further (and often more sophisticated) changes.

In their discussions with the evaluation team, the leaders of farmers' groups expressed their desire to move upwards along the technological spiral. These expressions underscore the success of OFPEP in sowing the seeds for production technology changes in the target communities. However, satisfying this demand cannot be achieved by OFPEP alone. It appears that OFPEP has not recognized fully this aspect of their technology introductions and therefore has not planned and prepared adequately its response for moving their target communities along the next step in the upward spiral.

Another drawback of strict adherence to the demand-driven approach is the possibility that a technology is adopted for different reasons than those for which it was introduced. One such example is the adoption of live fencing using euphorbia. It was introduced as a soil conservation technology against wind erosion in the drier areas of Senegal north of the peanut basin. The farmers adopted this technology because they found it useful in protecting the cassava crop from animals. Cassava, an important drought-resistant food crop in these areas, is a highly-valued food source before the harvest at the end of the rainy season, when household food stocks are at

their lowest or are non-existent. Thus, this live fencing technology was adopted because of its protective function, rather than for its soil conservation effect.

3.2.4 The Need for Research Support Linkages

There may be a general tendency in farmer-first participatory technology introduction programs to over-emphasize the indigenous, collective wisdom of the farmers and to downplay (or ignore altogether) the need or relevance of the results or inputs from scientific research. This fallacy can lead to well-intentioned but misdirected efforts. The importance of research support can be illustrated by comparing and contrasting the level of research involvement between the seed and soil fertility programs of OFPEP/Senegal.

In Senegal, the seed technology interventions appropriately targeted the main food crops: rice, cassava, cowpeas, sorghum and millet. The introduction of rice varieties has been an outstanding success. It would be worthwhile to look at some possible factors responsible for this success and draw lessons therefrom.

One of the areas where rice is grown is on the flood plains of one of Senegal's river basins in Nioro and Kolda. The low yield of rice was immediately identified through the initial PRA with these farmers. Other problems identified in the PRA included low phosphorus (P) fertility status of the soils, iron and aluminum toxicity, salt water intrusion during the passage of the annual river flood wave and sand intrusion due to gully erosion of the sloping lands above the flood plain.

The smallholder rice paddies rarely exceed half a hectare and women provide most of the labor involved. Depending on their position on the floodplain, the rice paddies are either completely inundated, periodically inundated, or non-inundated during the growing period.

OFPEP's strategy has been to introduce varieties and practices appropriate to these three landscape situations of the rice paddies. The completely inundated fields (with more stable water availability) were better transplanted to a long season variety. Shorter season varieties are more appropriate to the less stable water supply in the periodically inundated and non-inundated landscape positions. Implementing this technology incurs little cost (except for the seeds), but requires some degree of departure from the traditional use of a single variety for all landscape situations. However, it required quite a bit of convincing and education and discussion between the trainer and the farmers. It should be noted that the in-country OFPEP team member, Alphonse Faye, guiding this move is a seasoned rice specialist with considerable research experience with the *Institut Senegalais de Recherche Agricole* (ISRA). It is also important to note that the technology came out of the synthesis of Mr. Faye's sound scientific knowledge and the ongoing rice research at ISRA, coupled with information from the farmers about the historical performance of their current practices. The adoption and diffusion of this change in the rice-based system and its positive impacts on rice production and rice availability in the target communities in Nioro and Kolda are documented (OFPEP 1994, 1995, 1996, Phillips, 1996).

In contrast to the adoption and diffusion of rice varieties in Kolda and Nioro, soil fertility improvement practices have been less adopted (In fairness, the soil fertility program of OFPEP/Senegal is only 2 years old compared to the 10-year-old rice program) Nevertheless, farmer-implemented and -managed (FIFM) demonstrations with NPK fertilizers have shown potential for doubling and tripling of yields and for a distinct shift to higher levels of production regardless of variety and location Table 2 and Figure 1 show the positive shift in the yield ranges from paired FIFM demonstration plots with and without NPK inputs in 2 villages in Nioro and 2 villages in Kolda It also illustrates the potential variation in the responses of the various soils to fertilizer inputs It is significant to note that the ongoing research information base is not present to support this aspect of the OFPEP Senegal program to the same degree as is the case for the introduction of rice varieties Without this supporting information, trainers cannot provide science-based answers to willing farmers as to what nutrients to apply, how much, and when It would seem that farmers will not be convinced without some way to permit them to relate the observed yield increases to some direct indicator of soil fertility The concept of soil fertility and its impact on yields requires a greater degree of abstraction than that of a higher-yielding variety whose performance is directly observable from day to day

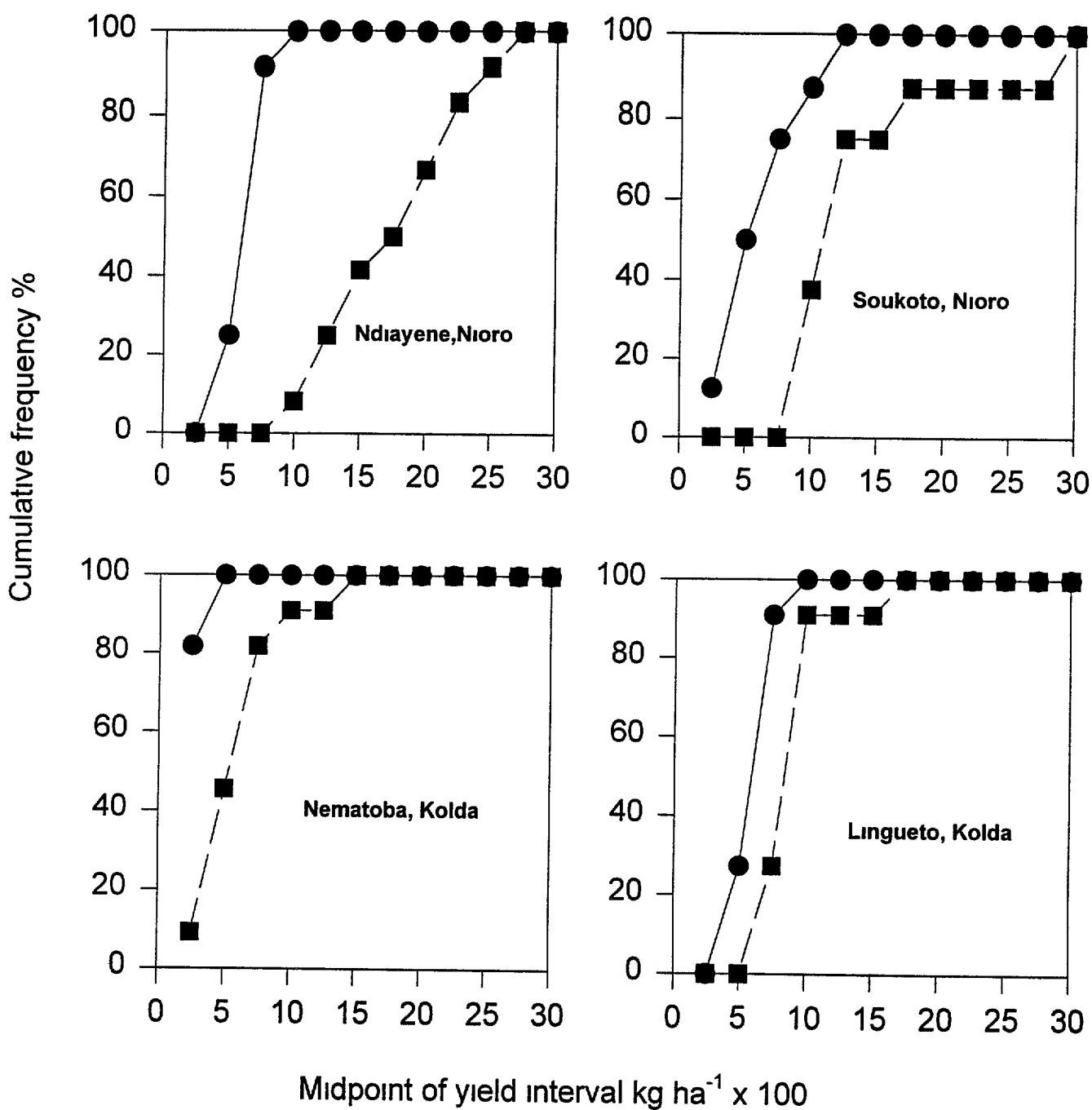
Table 3 The shift in rice yields in paired demonstration plots with and without NPK fertilizer application as indicated by the number of plots falling in specified yield ranges for two villages in Niore and two villages in Kolda, Senegal

Number of plots in the specified yield range kg per ha

Region	Village	Total paired plots	<500	500-1000	1000-1500	1500-2000	2000-2500	2500-3000	3000-3500	3500-4000	4000-4500	4500-5000	5000-5500	5500-6000
Niore	Ndiayene	12 (-NPK)	0	3	5	4	0	0	0	0	0	0	0	0
		12 (+NPK)	0	0	0	1	2	2	1	2	2	1	1	0
	Soukoto	8 (-NPK)	1	3	2	1	0	1	0	0	0	0	0	0
		8 (+NPK)	0	0	0	3	3	0	1	0	0	0	0	1
Kolda	Nematoba	11 (-NPK)	9	2	0	0	0	0	0	0	0	0	0	0
		11 (+NPK)	1	3	5	1	0	1	0	0	0	0	0	0
	Lingueto	11 (-NPK)	0	3	7	1	0	0	0	0	0	0	0	0
		11 (+NPK)	0	0	3	7	0	1	0	0	0	0	0	0

Adapted from data provided by Amadou Diouf, soil fertility program leader OFPEP/Senegal

Figure 1 Cumulative frequency distributions of yields (shown in Table 3) with (closed squares) and without (closed circles) NPK fertilizers for 2 villages in Nioro and 2 villages in Kolda



Another illustration of the need for greater research involvement is the compost making program in the dry areas (400-600 mm mean annual rainfall) of Senegal. This program is very effective in that a large number of farmers have constructed compost pits (48 pits in the village of Baback totaling 200 -250 inhabitants). Demonstration plots have shown a doubling and tripling of millet and sorghum yields from application of compost. Therefore, the adoption appears logical, in that making of compost is a reasonable alternative and can serve as the intermediate step to use of commercial fertilizers if the latter are either unavailable or inaccessible to the farmers.

In essence, composting permits collecting and bulking the nutrients contained in organic materials from a variety of sources (crop residues, household wastes, fuel wood ashes, animal droppings etc.) in one place. However, the question is whether compost application produces improvements in soil fertility commensurate with the labor and time it takes. If available, would it have been better to use a commercial source of nutrients? A pit of average size 2m x 2m x 1m, equivalent to a volume capacity of 4 cubic meters, is used to make compost for a quarter hectare. At an average dry density of 0.5 gram per cubic centimeter for the compost, 4 cubic meters of compost is equivalent to 2000 kg of dry compost.

Phosphorus (P) is known to be the most limiting nutrient in the soils (Alfisols) most commonly used for growing sorghum and millet in the drier areas of Senegal. The question is how much P is contained in this 2000 kg of dry compost. This would depend on the composition of the organic materials used for making the compost. The P content of crop residues or animal droppings is not expected to be high in areas with P-deficient soils. The P content of most vegetative tissues often is less than a quarter of one percent, equivalent to 2500 ppm. A P content of 2500 ppm in 2000 kg compost is equivalent to 5 kg P. [Incidentally, reported analysis (OFPEP, 1996) of samples from compost made by 33 farmers after training in 4 districts in Kenya gave a P_2O_5 (equivalent to 44% elemental P) content ranging from 5 to 64 ppm with an average 16 ppm (equivalent to 7 ppm elemental P). It is possible that these reported numbers should be at least 100 times greater. Otherwise, if correctly reported, a P content of 7 ppm would give a total P in 2000 kg dry compost of only 14 g.]

It could be argued that the crop response, if any, to compost is often related not only to the supply of nutrients in the compost but also to the supply of beneficial soil organisms and to improvement in aggregation and aeration through humic substances produced by microbial activity in the composting. However, the detritus recycling in dry Alfisols in Senegal is mediated by microarthropods (mainly termites) and therefore it is unlikely humic substances will persist after application. In any case, the sandy Alfisols are already well-aerated and better aggregation, if any, is unlikely to produce any additional response to compost above the effect on soil fertility.

The labor inefficiency of compost making as a fertility improvement technology is further increased by the alternative use of crop residue and droppings (for burning or construction), the need for a continuous supply of scarce water to keep the compost pits moist in a desiccating environment, and the lack of carts to transport the bulky compost from pit to field. The question is, therefore, what would have been the adoption of compost making if the alternative of using commercial P to remedy the P deficit in these soils were introduced at the same time? What

would be the effect, as the OFPEP director has suggested, of adding locally-available rock phosphate to the pits to increase the P content of the compost? The lack of definitive answers to these questions underscores the need to build in strong research support linkages for every aspect of the OFPEP programs in the four host countries. Incidentally as one villager observed, a benefit of compost making quite unrelated to soil fertility is that it helps keep the villages cleaner because most of the litter goes into the compost pits

3 2 5 Findings and Conclusions on Farmer Impacts

In conclusion, the evaluation team found that the overall impacts of OFPEP technologies and activities on farmers (especially women) has been positive. The technologies introduced and adopted have resulted in major impacts such as

- improved yields
- increased household food security and incomes
- improved diets and nutrition
- better stewardship of the soil resource
- increased availability and quality of improved seeds and planting materials

These impacts have occurred both within and outside of the target communities

The impacts have been documented reasonably well, mainly through formal reporting mechanisms instituted either directly by OFPEP or indirectly through its collaborating partners. Documentation of impacts was also made in special studies and consultancies. Several well-written reports (for example, Phillips, 1996) were done by Peace Corps volunteers outside of their normal reporting requirements. The OFPEP consultancy reports tended to recycle and restructure the information already contained in existing reports and program documentation without adding new insights and suggestions.

The documented impacts were amply corroborated by the evaluation team during their discussions with farmers and farmers' groups. For example, Mathio Faye, at the village of Baback, Senegal, is convinced of the benefits of compost in his fields and would like to add another four cubic meter pit to make compost for another quarter hectare field. Three time zones away in Uganda, Alex Mbato, speaking for a women's group that has received training and technical help from OFPEP since 1995, claimed it enabled him to be the best maize and sorghum farmer. Using farmyard manure helped him produce more. There were many more such expressions by farmers and group leaders of benefits derived from adoption of OFPEP-introduced technologies.

The impact on knowledge, attitudes and problem solving capacity, and other subtle changes in philosophical orientation as a result of OFPEP's participatory approach, is less well documented. In fairness, such changes are much more intangible, variable and uncertain and are difficult to

measure and quantify. The evaluation team was shown the records that community groups had carefully kept of their meetings and deliberations. In discussions during field visits it was encouraging to see that the farmers were looking forward to, and were willing to make, the needed changes and sacrifices to better their lives.

However, the evaluation team noted the following:

- The range of technologies and the area covered by the target communities appear to have over-extended the current resources of OFPEP. It is not sufficient to launch a technological change and assume it will propagate without further action. A constant follow-up effort is required to fuel and guide its growth. It seems evident that further expansion of OFPEP into new technologies or areas in any of the four countries would over-extend the OFPEP teams.
- OFPEP needs to base its technology introductions on sound science coming out of ongoing research. As discussed above, there is a need to build strong research support linkages.
- Also discussed above, OFPEP needs to anticipate the next step in the upward technology spiral and to adequately take these projections into account when developing joint workplans with their partners.
- OFPEP needs to develop hypotheses relating to farmer impacts, and to use these to drive the data collection for a more systematic monitoring and evaluation component.

3 3 Findings - Senegal

The evaluation team visited OFPEP/Senegal during the period May 12-16 and offered the following findings to OFPEP staff

- The participatory and demand-driven approach of OFPEP as it has been implemented in Senegal is good and appropriate. The activities observed on the ground by the evaluation team matched the program's design and implementation plan. If ways are made available to continue it, OFPEP should be continued and strengthened.
- Critical to the success of OFPEP/Senegal has been the selection of effective implementing partner organizations. From the beginning of the program, OFPEP/Senegal staff recognized the importance of good training and follow-up and capitalized on opportunities to work with organizations such as Peace Corps and CCF where there has been a mutuality of development agendas and strong field capacities to provide training and extend technologies. Inclusion of the partner organizations on the OFPEP advisory council has contributed to a multiplier effect of the OFPEP technologies and approach.
- While farmer training and extension have been the strengths of the partner relationships, data collection and reporting have been inconsistent and need improvement. These may be aided by formalizing the partnership arrangements to more clearly spell out requirements as they pertain to information collection and reporting.
- OFPEP/Senegal staff are knowledgeable about the technologies which they are introducing. They are well-known and appreciated at both national research institutions and at the village level. One OFPEP-introduced improved rice variety is commonly referred to in much of the country as *Alphonse* after the OFPEP country coordinator Alphonse Faye.
- Field visits made by the evaluation team appeared to corroborate the impacts reported by Winrock, revealing increases in agricultural production, food security and farmer income.
- There was also anecdotal evidence that OFPEP has contributed to changes in the daily lives of farmers who have adopted the program's technologies. Although hard to document, farmers and farmers' groups spoke of having more options and a greater say in making decisions that affect their daily lives (empowerment).
- The seed component of OFPEP is technically sound and in great demand by farmers, implementing partners, and the Government of Senegal.

- Also in great demand has been the soil fertility component of OFPEP, although it has evolved more slowly than anticipated. Part of the reason for the slow start of this component has been that the technologies have been introduced one-by-one, rather than concurrently.
- Although participating farmers were aware of obstacles to production, and many were opting to adopt OFPEP-introduced technologies, it appeared that more could be done to help them better synthesize these technologies. It is believed that more technical knowledge would make farmers better experimenters and better sources of information.
- Of the OFPEP technologies introduced, those most in demand were ones that were income-generating or that addressed food security. It would appear that any continuation of OFPEP should likewise focus on economic development and food security, and should include women's leadership.
- In addition to impacting production, food security and income, OFPEP has had unintended outcomes. Examples of these include live fencing and compost pits. The success of each has been due partially to the positive appeal of keeping villages cleaner or keeping animals out of fields and gardens.
- The team observed that the practice of some farmers in using compost is highly varied and, for that reason, questionable. It would appear that composting would be better associated with high-selling cash crops and might be more effective if it included rock phosphate. Utilization of rock phosphate, although more costly, would save considerable time and labor.
- As is the case with implementing partners, OFPEP/Senegal has been opportunistic in its selection of technical partners (ISRA and NRBAR) that would seem to offer potential for effective collaboration. The team observed that these relationships are relatively nascent, but may evolve to become more substantive.
- There is a high level of collaboration between OFPEP and USAID/Senegal. OFPEP/Senegal is well-integrated into the USAID mission strategic objective team. The OFPEP country coordinator regularly attends SO meetings, and data from OFPEP is used in decision-making and reporting by the corresponding SO team. Data collected by OFPEP was, in fact, included in the Mission's 1997 R-4 document.
- Similar to the opportunism taken in linking with research institutions (technical partners) and effective implementing partners, OFPEP/Senegal is being propitious in locating funding partners, evidenced in support from Monsanto in one of the rice components.

- The evaluation team is cautiously optimistic about the new relationship with Monsanto. Partnering with a corporation is different from working through such organizations as Peace Corps or CCF, where agendas may vary yet are still NGO agendas. Working through the private sector is uncharted territory for Winrock. It also means a shift from low-resource agriculture to a higher level of technology. It is hoped that OFPEP/Senegal will approach its relationship with Monsanto in the same scientific way that it views its demonstration plots, i.e., carefully weighing different options and not straying from OFPEP cornerstones of farmer needs (demand) and participation.
- OFPEP/Senegal's multifaceted training and its emphasis on women are among the strengths of the program. Although there was not sufficient time for the team to explore thoroughly training curricula, OFPEP and its predominant partners, CCF and Peace Corps, received positive reviews from training participants, who indicated increases in their respective capacities to provide technical training. Training content and training materials reviewed as part of this assessment seemed appropriate. In need of improvement, however, is follow-up to training, which is irregular and reactive rather than supplementary.
- There is evidence that OFPEP has likewise increased the capacity of local groups (GIEs and farmers' committees) to address obstacles to production and to organize collaborative work on projects such as live fencing, anti-salinity dikes and mobilizing resources to purchase inputs.
- There is anecdotal and quantitative data that OFPEP technologies are being adopted by non-OPEP participants through lateral diffusion.
- Among the non-production impacts of OFPEP are changes in traditional male-female agricultural roles.
- According to partner organizations, OFPEP has also brokered relationships with, and increased access to, government institutions. This has led to increased prestige and visibility for OFPEP and its partners.
- Through the introduction of improved technologies, OFPEP is contributing to increased bio-diversity in the rice-based system.
- OFPEP has fostered further empowerment of women through the formation and/or strengthening of women's groups and through increased production, thereby enhancing the prestige of women farmers as producers.
- OFPEP's management structure, although multi-layered and complex, appears to function effectively. This is despite distances and many players including Winrock.

headquarters, OFPEP, two advisory committees, international and local partner agencies, and multiple field sites covering a large geographic area of the country

- Although reported as an issue in the mid-term evaluation, OFPEP activities in Senegal are well-documented
- During the course of this assessment, participating farmers frequently identified lack of access to credit among the greatest obstacles to production. OFPEP/Senegal should consider adding (or facilitating through other sources) assistance and training in highly-requested, non-production activities to its menu of technology options

3 4 Findings - Uganda

The evaluation team visited OFPEP/Uganda during the period May 18-22 and offered the following findings to OFPEP staff

- The OFPEP approach as it has been implemented in Uganda is good and appropriate. If ways are made available to continue it, OFPEP should be continued and strengthened
- OFPEP/Uganda has forged effective partnerships. The evaluation team found that among those farmers' groups interviewed and/or visited, all were relatively well-organized and enthusiastic and held a common interpretation of OFPEP
- OFPEP/Uganda has also forged effective linkages with NGOs such as COOPIBO and JEEP, and research institutions like Namulunge and Makerere University. It would appear that these should be continued and expanded where possible, and that new relationships with other groups should be pursued where there is mutuality (e.g. NARO, on mosaic-resistant cassava)
- It appears that OFPEP/Uganda is demand-driven and participatory. Rather than promoting prescribed packages, technologies presented under the aegis of OFPEP are *introduced* as options from which the farmers may choose or not choose. The activities that the evaluation team observed on the ground matched the program design and other literature about the program
- Technologies introduced by OFPEP address real obstacles to food production in Uganda. Improved seeds and soil fertility are priorities for farmers, implementing partners, and the Government of Uganda
- Although improved seeds and soil fertility have been the cornerstones of OFPEP/Uganda, the program has been opportunistic and responsive, addressing obstacles to production which were outside the program's original design (e.g. cassava production through the introduction of disease-resistant varieties and improved cook stoves)
- The activities most in-demand by farmers and farmers' groups in Uganda are those which pertain to food security and income generation. It would appear that OFPEP should continue to emphasize these areas
- OFPEP staff are knowledgeable about the technologies that they are introducing. Even though most of the staff is relatively new to OFPEP (the first project coordinator resigned and one extension worker died suddenly), they seem appreciated and known at the village level

- The OFPEP/Uganda structure relies on technical support and advice from the East African coordinator, who resides in western Kenya. The coordinator also is relied on to foster linkages with research, governmental and other institutions which are relevant to OFPEP.
- The few site visits made by the evaluation team appeared to corroborate quantifiable impacts of the program in the areas of increased agricultural production, food security and income.
- It also appears that OFPEP has led to changes in the daily lives of farmers in that the adoption of technologies provides them with more options and more control in decision-making. Individuals and groups spoke of changes in attitudes, knowledge and organization of participating farmers. Farmers were more hopeful and felt, for the first time, a new level of empowerment.
- There is, likewise, evidence that OFPEP has increased the capacity of local grassroots groups. They have organized to provide technical assistance and, in some instances, have banded together to purchase inputs such as improved seeds. Participating groups already in existence before OFPEP indicated that they are enjoying increased prestige, a result of participation in an effective and highly-requested program.
- OFPEP/Uganda has fostered further empowerment of women through the formation and/or strengthening of women's groups. Those groups interviewed indicated that association with OFPEP has contributed to increased prestige and confidence of women as agricultural producers. It would appear that any future OFPEP activities should focus on women's leadership.
- In some instances, the evaluation team found evidence that OFPEP has contributed to changes in traditional male-female roles. For example, after introduction of row cropping, some men were involved in weeding, normally women's work in Uganda. Men and women were observed jointly processing cassava. There seems to be an awareness of gender issues among most participating groups. OFPEP/Uganda has recognized gender as an important development issue and has included it at various levels of staffing, training, management and programming.
- There is evidence that OFPEP technologies are being diffused laterally to non-OFPEP farmers and even to Government of Uganda extension agents.
- Although the team did not observe any training sessions, and did not have time to conduct an in-depth review of training materials, it appears that OFPEP training and corresponding materials are sufficiently comprehensive and appropriate. Training participants were positive about the sessions they had attended, although many expressed a need for more follow-up. Both NGO and OFPEP staff indicated that

the training capacity of a number of NGOs was limited either because their own training capacity was low or because they lacked the means to travel to training sessions or conduct follow-up visits

- The evaluation team is concerned that the high level of demand for OFPEP technologies and the rapid growth of the program will lead to a dilution of the program's effectiveness. OFPEP is working with an increasing number of groups in an increasingly broader geographic area. Moreover, it is introducing more technologies and working with more crops, yet the staff size (one extension worker per district) has remained the same. The team is concerned that the capacity to collect data and provide timely and effective follow-up will be compromised.
- The relationship with the program's lead agency in Uganda, ACDI, has been good. The team observed, however, that there is a high level of uncertainty over the future of OFPEP/Uganda. Discussion with the USAID/Uganda Mission and ACDI were not encouraging regarding continued funding through the PL-480 program, due to apparent changes in PL-480 guidelines. This uncertainty not only jeopardizes OFPEP's programmatic momentum, but affects staff and partner morale and overall project management.
- Contributing to the uncertainty over the program's future funding is an apparent conflict between approaches to agricultural productivity in Uganda supported through USAID funding mechanisms. The new USAID/Uganda Mission-supported IDEA program is input-driven, results-oriented and designed as a short-term initiative. On the other hand, OFPEP is demand-driven and participatory and thus is slower, oriented towards low-resource agriculture, and designed to raise individual and institutional capacity. In some areas, IDEA is providing free inputs to farmers and, according to some, is paying farmers to plant demonstration plots. OFPEP offers no financial incentives, and staff feels that the IDEA model contributes to confusion and interference in the districts where both programs are operating.
- Despite signs of disinterest from PL-480, OFPEP may be in a position to capitalize on other opportunities for funding. ODA and ICRAF, for example, appear to have a possible interest in collaboration. There may also be opportunities to look to the private sector as Winrock has done in Senegal with Monsanto. Additionally, despite the apparent current lack of interest from PL-480 in Uganda, it would seem that OFPEP is in a position to supplement IDEA through assistance in data collection, monitoring and evaluation, and demonstration plots.
- Apart from the question of future funding, the progress of the program over the past five years illustrates that OFPEP/Uganda is poised to consider moving towards WI's new paradigm *From Subsistence to Commercial*. Some OFPEP-trained lead farmers are already, for example, adopting technologies which have put them past subsistence level. A few of them have become *de facto* seed contractors. Some

farmers appear to be in a position where the use of small-scale equipment such as seeders would put them over the hump to become commercial. This would seem to be a natural progression for the program if OFPEP continues to succeed. This progression may also be necessary due to the high labor-intensity of OFPEP's low-resource approach, which ultimately will reach a saturation point where no further labor-intensive technologies can be taken on by the farmers.

- In addition to production technologies, the evaluation team found strong interest among farmers and farmers' groups in pre- and post-production technologies. Technologies most in demand were IPM, post-harvest storage, water management, credit, and marketing.
- The gender specialist has contributed to OFPEP/Uganda's promoting the inclusion of women and women's organizations in design, implementation and monitoring of OFPEP activities.
- OFPEP could be doing more to capture the program's achievements. This may be particularly important and useful considering the program's uncertain funding.

3.5 Findings - Kenya

The evaluation team visited OFPEP/Kenya during the period May 22-26 and offered the following findings to staff

- The OFPEP approach as it has been implemented in Kenya is good and appropriate. OFPEP should be continued and strengthened if there are resources to do so.
- It appeared to the evaluation team that the program is demand-driven and participatory. The team confirmed that activities in the field matched OFPEP's design and other program literature.
- OFPEP technologies are *introduced* to farmers as options rather than prescribed technical packages. This is an important aspect of OFPEP's success and of its potential to be sustained.
- The activities and technologies most in demand are those that pertain to food security and income generation.
- Field visits and discussions with farmers and farmers' groups reconfirmed that seeds and soil fertility are priorities. This reaffirms that the technologies introduced by OFPEP are relevant as they address real, not perceived, obstacles to production.
- OFPEP/Kenya has developed effective partnerships with implementing organizations. These partnerships, which include CCF, CARE and a variety of local church groups, are mutually beneficial and complementary.
- OFPEP/Kenya has forged important linkages with research and technical institutions including KARI (Kenyan Agricultural Research Institute), ICRAF, Makerere University, the University of Nairobi and the GOK Home Economics Unit. This is significant as these linkages operate in both directions between the institutions and farmers and offer many opportunities to all program participants.
- OFPEP/Kenya has also established relationships with educational institutions such as Edgerton University and the Rumogi Institute for Advanced Training, affording students field practicum. This has been mutually beneficial as students have carried out land surveys and data collection for OFPEP and have gained practical knowledge and field experience to supplement theory and course work.
- OFPEP/Kenya staff are knowledgeable about the technologies they are introducing. They are appreciated and known at the village level.
- OFPEP/Kenya staff are seriously constrained by lack of transport, which limits ability to carry out extension work and limits effective follow-up. Unlike

OFPEP/Uganda where OFPEP staff have motorcycles, or Senegal where collaborating partners often provide transport, Kenya staff rely on public transportation and spend a good amount of time on foot getting to remote rural sites. Lack of timely follow-up has contributed to instances of misinterpretation of some technical training and has compromised some demonstrations due to improper siting or plotting.

- Similar to OFPEP/Senegal, the in-house presence of the OFPEP regional coordinator offers a strong technical resource including technical support, program planning and a level of credibility and contacts to more effectively access research institutions and donors.
- Despite significant achievements over the program's first three years, OFPEP/Kenya staff would benefit from more training, especially in the area of training design and delivery. To this point, the staff uses a TOT model, in-person technical assistance and demonstration plots as its primary training methodologies. Alternative methodologies would make training effective and newer staff could benefit from training in PRA.
- Although farmers are quite knowledgeable about obstacles to production, and are aware of the purpose of OFPEP-introduced technologies, it appears that more can be done to help them synthesize information on the improved technologies. It would seem that if OFPEP provided more scientific information in an appropriate way to lead farmers, including the reasons how and why technologies work, they would become more effective trainers and experimenters.
- The few site visits made by the evaluators appeared to corroborate increases in actual production, food security and income reported in the OFPEP/Kenya documents. Many OFPEP farmers have been recognized by the local government officials and have received awards and trophies for their produce and goats. Students serving practical internships with OFPEP have also gained recognition and awards.
- Inclusion of the dual-purpose goats in OFPEP has impacted farmer income and soil fertility, especially in areas where landholdings are very small.
- There is evidence of adoption of OFPEP technologies, especially in the area of improved seeds. Adoption of soil management technologies has been slower, but appears to be gaining momentum as OFPEP staff is increasingly comfortable with it.
- Adoption of the technologies has led to changes in the daily lives of participating farmers, giving them more options and more control in decision making. Although difficult to document, interviews with individual farmers revealed a sense of greater

self-confidence and hope, and increased knowledge as a result of the early successes of the program

- There is similar anecdotal evidence that OFPEP has improved the capacity of participating NGOs and other groups to plan, organize and provide training. Due to their participation in OFPEP, many groups have enjoyed increased credibility and prestige
- At the same time, most of these groups have difficulty in collecting data and in reporting major problems because OFPEP is dependent on these groups to provide data
- OFPEP/Kenya has fostered further empowerment of women, first, by increasing their prestige as agricultural producers through the introduction and adoption of production technologies, and second, by strengthening the capacity of women's groups to plan, implement and advocate for programs. As the majority of farm work in the area is done by women, it would appear that future OFPEP/Kenya activities should focus on women's leadership
- There is evidence that OFPEP seed technologies are being diffused laterally to non-OFPEP farmers
- There is uncertainty about future funding for OFPEP/Kenya. Opportunities for funding may exist either to continue at the present level, or even to expand the program. It would appear that a separate strategy is needed to follow either of these scenarios, and that these strategies should include exit plans. In keeping with OFPEP's participatory mode, any strategy should be developed with program partners
- As in the case of OFPEP/Senegal and Uganda, the situation in Kenya reaffirms the viability of Winrock's new paradigm, *From Subsistence to Commercial*, an idea that in the long run, its efforts should be made to lift farmers out of mere subsistence farming and to increase their potential to generate income. Visits by the evaluators revealed that, as in the other program countries, some OFPEP farmers who have adopted OFPEP technologies are past subsistence and have become seed contractors. One possible caution or constraint to this new paradigm in Kenya is that the small size of farmer holdings may make commercial goals unreachable
- More than the other OFPEP program countries, Kenya has expanded the OFPEP menu to include non-production activities as necessitated by the program's success. One example is an effort to train women in soybean preparation. Working with NGOs and GOK home economics workers, OFPEP has developed a curriculum and materials to train Kenyan women who previously did not know how to prepare soybean products. Some fifteen or so recipes have been introduced and demand for

soybean is now high Improved varieties from Uganda have been introduced, resulting in increased yields and crop diversity This post-production activity has benefited production

- OFPEP/Kenya could be doing more to capture its achievements especially due to the program's uncertain funding, and because it leads to better decision-making The current reporting format is not the most effective way to attract donor funding because it is designed only to provide information to WI More effort should be made to demonstrate how OFPEP is helping to change the daily lives of participating farmers and their families

3 6 Findings - Ethiopia

The evaluation team visited OFPEP/Ethiopia during the period May 26-27. As the program is too new to review impact and the evaluation visit was confined to one day of meetings and one site visit for a discussion with OFPEP farmers, the evaluators offer only a few findings

- OFPEP's focus on improved seed varieties and soil fertility appears to address real obstacles to food production in Ethiopia
- OFPEP/Ethiopia has forged what appear to be effective partnerships with three implementing organizations (AVA, ASE, and CCF). Since the three groups are working in different regions with varying ecologies, the program has opportunity not only to introduce technologies but to see them diffused over wide areas
- OFPEP/Ethiopia and its partners are hampered by the lack of clear government policy for NGOs. Many PVO/NGOs, including Winrock, are unregistered, despite applying for registration over one year ago. Also unclear are reporting procedures and requirements for NGOs. The framework is clouded by the government's decentralization policy, which appears to be giving NGO monitoring authority to local government
- Participatory, low-resource approaches like OFPEP are new to Ethiopia and Ethiopian NGOs, which are accustomed to relief activities. It may take OFPEP and its implementing partners some time before communities understand and buy into the OFPEP approach
- Demonstration plots have been an effective way of introducing technologies, and, as farmers are seeing results, there are indications that the program is poised to take off
- Winrock is not registered in Ethiopia and it appears that registration will not happen in the near future, thus it must work through a lead agency that is registered. For the past several months Pact has been providing office space and some logistical support for the OFPEP coordinator. This relationship, which appears to be working, needs to be quickly formalized. Failure to do so may place OFPEP and the coordinator at legal risk. Furthermore, WI must work out its obligations to Pact

ANNEXES

- A Scope of Work
- B Itinerary
- C List of Persons Contacted
- D References Consulted
- E Lessons Learned by Winrock from the OFPEP Experience

Annex A SCOPE OF WORK

Scope Of Work Terms of Reference

Final Evaluation On-farm Productivity Enhancement Program(OFPEP)

I. Background

The present On-farm Productivity Enhancement Program (OFPEP), operating in four African countries in 1996, had its origin in 1987 when, with the support of the United States Agency for International Development (USAID), Winrock International Institute for Agricultural Development and the Center for PVO/University Collaboration in Development (The Center) launched the 5-year On-farm seed Project (OFSP) in Senegal and The Gambia. Success of this project in improving smallholder access to and use of viable seeds of improved varieties of food crops led to a continuation, with increased emphasis on cultural practices, particularly soil fertility and improved soil management.

Concurrently, USAID had been supplying technical assistance to nongovernmental organizations (NGOS) in Haiti, Senegal, Uganda, and Indonesia in support of a pilot Biological Fixation/Legume Management (BNF/LM) Outreach Project. This project focused primarily on the use of rhizobium on legume-fixing plants.

With the concurrence of USAID, the OFPEP approach proposed to address in selected countries both the issue of improved seeds and that of soil fertility and soil management, including but not restricting the soil operations to the use of rhizobium. Thus OFPEP came into being with initial operations in Senegal, The Gambia, and Uganda. The program later was approved for Kenya, and, more recently, with the decision of USAID to discontinue support of work in The Gambia, USAID approved transfer of the allocated funds to open operations in Ethiopia in 1995.

While in differing states of development and maturity, the programs in all four countries focus on seeds and soils. In addition, in Kenya there is extension work with the dual purpose goat and the role of goats in maintaining soil fertility and management and in supplementing the family income and well-being. A supplemental grant from the Food Industry Crusade Against Hunger (FICAH) has helped support OFPEP-Kenya generally and the dual-purpose goat activities specifically. Further, since 1993 the Monsanto Company has supported work on weed control in some of the target areas in Senegal.

II. Purpose and Rationale for Evaluation

While this final evaluation is a requirement of the USAID contract, the exercise has been designed and staffed so as to produce information valuable to all participants-USAID,

Winrock, and The Center, the collaborating agencies (public and private), other donors, and those interested in planning and implementing development programs. This program, designed and implemented in each country through a participatory process, represents a bottom-up, demand-driven approach to agricultural research, extension and development. It is hoped that a comprehensive, objective analysis of the process as implemented over a number of years will identify useful principles and potential pitfalls to guide future developers.

Of particular interest to USAID, Winrock, and The Center will be recommendations, observations, and comments that evaluators make with respect to objectives, content, and possible approaches relevant to possible continuance and/or expansion of the OFPEP activity in these four countries or elsewhere.

III Existing Performance Information Sources

The grant agreement, regular progress reports, the mid-term evaluation, workshop proceedings and related materials will be supplied to the evaluators by AMA.

IV. Statement of Work

Given the significant differences among the four countries (Senegal, Uganda, Kenya, and Ethiopia) in length and maturity of program, management of local operations, degree of involvement of local agencies, and turnover of staff, it will be appropriate to seek answers to and analyze responses on a country-by-country basis. Once this has been accomplished, it may be possible to draw conclusions and identify some basic operational principles.

It is recommended that the evaluation include, but not be limited to, the following lines of inquiry:

A. Training

- I Numbers of individuals (by category) trained, in what, by whom? "Category" refers to farmers (by gender), staffs of NGOs and other local groups, extension or other government staff, private sector. "In what" refers to the focus of the training in terms of subject matter. To what extent were these 'training-the-trainer' events? "By whom" refers to the identity of the trainer(s), e.g., OFPEP staff, NGO staff, extension workers, lead farmers, special consultants, or others.
- 2 What training methods or approaches were used most frequently? Found to be most effective? Have been adopted by local NGO staffs, extension workers, or others? In other words, to what extent did OFPEP introduce more effective training methods and to what extent have they been institutionalized by local groups?

B. Outreach and Diffusion

- 3 To what extent have the technologies introduced by OFPEP spread to farmers living outside the target areas or communities? How have these changes been observed and(or) documented? What technologies have spread most rapidly Improved varieties, cultural practices, soil management techniques, other?
- 4 What activities, if any, were conducted to encourage the spread of the technologies? Who initiated the activities?

C. Development of Databases

- 5 What databases have been developed relating to OFPEP target areas? What information is covered in the databases? When were these bases established? Who collected the information, and in what way? To what extent have these databases been Used and for what purposes? Shared with others? Kept up to date? Expanded? Abandoned?
- 6 To what extent have local collaborators (NGOS, extension, Peace Corps, others) assisted in developing the databases? Over time, what changes, if any, have there been in the interest in and attitudes about spending time collecting data? To what extent do they now recognize or perceive such activities as instrumental steps in disseminating technologies?

D. Agricultural Input Supply Systems

- 7 What changes, if any, have occurred in the local availability of these and other agricultural production inputs Seeds? Fertilizers? Inoculants? Weed control chemicals? Pest controls? Credit? To what extent can you relate these changes to OFPEP operations or activities?
- 8 What changes, if any, have occurred with respect to farmers' behavior with respect to seed Where they get it? How they save it from one crop to the next? What they do with surplus seed?

E. Dissemination of Information

- 9 Describe how the OFPEP staff and its collaborators produce and disseminate information about seeds, soil fertility, cultural practices, etc to NGO and extension staffs? Government decision-makers? Local leaders? Private sector firms? Farmers--Men? Women?
- 10 For any one of the specific audiences, how effective would you consider the content and treatment of the message(s)?

F. Organizational Linkages Established

11 Describe the nature and strength of links OFPEP has helped establish among institutions and organizations Within the host country? With entities outside the country? To what extent are these links likely to function after the end of OFPEP?

12 What potential linkages of value did OFPEP overlook or fail to address?

G. Operational Monitoring

13 How has the OFPEP staff monitored program activities on a regular basis over the life of the program? What have been the strengths and weaknesses in these activities?

H. Impact of OFPEP Activities in Country

14 In what ways has the OFPEP staff attempted to document and measure the extent to which OFPEP has made effective impacts in the target areas? In increase in crop yields? In adoption of soil fertility building practices? In improvement in diets of farm families? In availability of cash income for use in meeting family needs? In general welfare of people in target communities? In ability of local people to articulate problems and organize themselves to address them? What does OFPEP consider as its major outputs and impacts over the past 4 years? Provide case descriptions where possible

15 In what ways has OFPEP influenced the knowledge, attitudes, and operations of local and international NGOs and other community groups? To what extent can some of these groups carry on OFPEP-type activities without further intervention? What have these groups learned through their collaboration with OFPEP?

16 How well has OFPEP transferred concepts, methods, and orientation to working with farmers to NGOS, government agencies, and private firms? What have been the most effective ways of doing this?

I. Program Implementation in Country

17 How well has OFPEP integrated the seeds and soils components of the program in working in target areas? In working with specific NGOs?

18 How sensitive has OFPEP staff been to gender issues in planning and implementing activities in target areas? In working with specific NGOs?

- 19 How well has OFPEP addressed the multiple issues of sustainability in planning and implementing activities in target areas Of agricultural productivity? Of the environment? Of the program itself?
- 20 To what extent and in what ways has the OFPEP staff been able to generate local support, in cash or kind, for program activities?

J. Overall Program Management

- 21 How effective has been the collaboration between Winrock International and The Center? Were the divisions of responsibilities clearly expressed, understood, and respected by both parties?
- 22 In what ways might the integration of program content with program process be more effectively accomplished?
- 23 Considerable effort has gone into improving OFPEP's approach to monitoring and evaluation? How adequate is the system in its present state? How might it be improved?
- 24 Given the limitation on U SAID support and the need for matching funds, considerable staff effort now goes to identification and generation of outside sources of support that leverage the USAID core support without compromising program objectives How appropriate is the current outside support? What criteria should guide Winrock in selecting additional support for a new program with similar objectives?
- 25 Have financial reports and vouchers been submitted in accord with USAID requirements?
- 26 Where an organization other than Winrock has been the country lead, how satisfactory has been program performance and management? What problems, if any, have mired?
- 27 Has USAID provided funds to OFPEP in a timely manner each year?

K. Conformance with USAID Policies

- 28 Agency policy is to emphasize and support participation and substantive contributions of women in the development process How has OFPEP conformed with this policy?
- 29 Agency policy is to enhance/protect the natural resource base of cooperating countries How has OFPEP conformed with this policy?

L Methodology

The methods to be used to answer the evaluation questions will be determined and agreed upon at the team planning meeting

M. Evaluation Team

The evaluation team will consist of two external participants, Mr John Zarafonetis Team Leader and Dr Naraine Persaud, soil scientist, and Dr Pierre Antoine of Winrock International The team will be accompanied in Senegal by Ms Sallie Jones and Ms Mary Liakos of PVC's Matching Grant Division The team will be assisted by Winrock staff in-country

N. Schedule, Itinerary, Logistics

Field work in Africa will take place from May 12-24 (leaving from and returning to the U S on May 10 and 25 respectively Final details of the in-country schedules will be worked out during the team planning meeting All logistics and in-country transportation, including overland transportation between sites in neighboring countries is the responsibility of Winrock International

O. Deliverables

Dr Naraine Persaud Sections of the final evaluation report as directed by the team leader on disk and hard copy by June 15, 1997

Dr John Zarafonetis A final evaluation document submitted both on diskette and hard copy form will be submitted to the PVC Project officer and the AMA Program Manager The report will follow the format and requirements listed below The expected deadline for the final report is July 11, 1997

P. REPORTING REQUIREMENTS AND FINAL REPORT FORMAT

The final report will be delivered in Washington Final format and software is to be determined at the completion of the field work by the PVC Project Officer or by the AMA Project Manager The final evaluation document should be concise The report should contain the following sections at a minimum

- **Title Page** - including the project name and number, names and titles of consultants and evaluation team members, that this is a final evaluation, the date, and who commissioned the report

- List of Acronyms used in the report
- Executive Summary
- Table of Contents
- Introduction and Background
- Methodology Used
- Findings and Conclusions

Required Appendices

- 1 The Scope of Work for the Evaluation
- 2 The Evaluation Itinerary
- 3 Lists of Persons Interviewed

Notes to Evaluators For each country, please IDENTIFY

- 1 Local collaborating organizations, and extent of their involvement
- 2 Target arm or communities involved in OFPEP activities
- 3 Target crops and practices
- 4 In-country local staff and specific role(s) of each
- 5 All documents cited
- 6 Years (dates) program operated in country,
- 7 Principal informants, including farmers, farm leaders, NGO representatives, government workers, private sector, etc This being a participatory project, we need to include a wide range of participants in the evaluation

Q. Level Of Effort

See attached chart

R. Contact Person

USAID	Sallie Jones, Project Officer	703-351-0191
AMA Technologies	Noreen O'Meara, Program Manager	703-741-0564
Winrock International	Pierre Antoine, Program Director	501-727-5435

51

Annex B ITINERARY

Principal Themes
OFPEP EVALUATION PANEL VISIT
to
Winrock International Institute for Agricultural Development
May 6-8, 1997

Tuesday, May 6

Arrival

Lodging

Meet with Pierre Antoine

12 00 Lunch with William Sheets, director of development

1 00 p m. Opening Session

Introduction of guests and participants

Evaluation Program (U S.A and in-country)

. . . Pierre Antoine

. . . Sallie Jones

John Zarafonetis

Review of OFPEP implementation

. . . Pierre Antoine

Mary Lou Surgi

Chronology, approach, management, leverage of funds,
achievements, lessons learned, direct and indirect impacts--
institutions and users--remaining challenges

General Discussion

6 p m Dinner, Mather Lodge, State Park

Wednesday, May 7

8 30 a.m. Integration of OFPEP with Winrock programs

Agriculture DivisionHenk Knipscheer

Leadership and Human Development Division Sarah Tisch

General Discussion

12 00 Lunch

Continuation of agenda

Future of OFPEP with PVC

Questions and issues raised by Evaluation Panel

6 30 Dinner, home of Pierre and Kim Antoine

Thursday, May 8

8:30 a.m. An Overview of Winrock's Programs and VisionEarl Kellogg

General Discussion

Comments from Evaluation Panel

11 00 a.m. Early departures for airport John Zarafonetis, Mary Lou Surgi

12 00 Lunch

Other Winrock programs, site visits

Departures to airport

OFPEP/Senegal Proposed Schedule for Evaluation Team 12-16 May, 1997

Day 1 . Monday, May 12

morning

- 10 30 USAID courtesy visit
- lunch at *Les Gourmandises Africains* restaurant Evaluators with Mary Lou Surgi, Pierre Antoine, Lisa Washington-Sow, Jeff Provotny (CBNRMS) and Alphonse Faye

afternoon

- Introduction of OFPEP/Senegal team
- presentations and discussions on OFPEP activities

Day 2 Tuesday, May 13

morning

- 10 45 meeting with the Peace Corps Discussions with APCD Natural Resources, APCD Agriculture, PCV leaders of Environmental Education and Sustainable Agriculture programs

afternoon

- 15 00 Meetings with ISRA/NRBAR
- 16 00 Meeting with ISRA Dr Adama Faye, Chief of Research and Development and Dr Jean Pierre Ndiaye, Scientific Director

Day 3 Wednesday, May 14

all day Thues

- on site visit of CCF CBO at Baback
- visit with World Vision/Thiès
- visit to Peace Corps Training Center

Wack n Gouna (Kaolack)

- visit to Ndiayène Poste

Day 4 Thursday, May 15

morning

- meeting with CCF West Africa Regional Director
- USAID preliminary findings of the evaluation

afternoon

departure for trip to St. Louis to discuss with farmers who have conducted weed control demonstrations Field visit to be conducted by Mbaye Guèye, brother of Mme Penda Cissé (Weed control program collaborator)

Day 5 Friday, May 16

return from St. Louis

(pro eval sch)

ON-FARM PRODUCTIVITY ENHANCEMENT PROGRAM
FINAL EVALUATION MAY 18-22, 1997

PROPOSED ITINERARY

DAY/DATE	TIME	ACTIVITY/VENUE	FACILITATOR/GUIDE
Sunday May 18, 1997	5 30-6 30 p m	Meet OFPEP(U) Staff Fairway	Sandra Blanchard/Ben Ekoot
Monday May 19, 1997	9 00-10 00 a m	Meet with FFPO, Greg Farino and PL480 Manager, Bernie Runnebaum at PL480, BUGOLOBI	Sandra Blanchard
	10 30 a m - 1 00 p m	Plenary Session with collaborators/Partners (Lunch break at 1 00 - 2 00) UCA Conference Room	J Zarafonnetis
	1 00 - 2 00	Lunch	
	2 00 - 4 00	With staff - UCA Conference Room	J Zarafonnetis
	4 30- 5 30 p m	Meet with COOPIBO Offices, Kansanga	Dr Moses Onum
	5 30 - 6 00 p m	Meet with JEEP JEEP Offices, Kabalagala	Beatrice Luzobe
Tuesday May 20, 1997	9 00-12 00	Group 1 with staff	J Zarafonnetis
	9 00 - 9 30 a m	Group 2 Makerere University, Soil Science Department.	Dr Pierre Antoine/Beatrice Luzobe
	10 00 - 10 30 a.m	Group 2 Uganda Seed Project, Kawanda	Dr Moses Onum
	11 15 a m - 12 15 p m	Group 2 National Cassava Program, Namulonge Agric & Animal Research Institute	Dr Moses Onum
	1 00 - 2 00 p m	Lunch in Kampala.	
	3 30 - 5 30 p m	Visit with farmers in Najja, Mukono District.	Julian Nyachwo
	6 00	Night at the Hotel Triangle, Jinja	
Wednesday May 21, 1997	8 30 a m	Leave for Iganga District	
	9 00 a m - 12 noon	Visit with farmers in Iganga District, Magamaga, Baitambugwe, Nakalama	Ezra Okoth.
	12 00 p m	Drive to Tororo	
	1 00 - 2 00	Lunch at the Rock Hotel, Tororo	
	2 30 - 4 30	Visit with farmers in Sikhubira area, Tororo district.	Nathan Koteki
	6 30-	Night at the Rock Hotel, Tororo	
Thursday, May 22, 1997	7 00 - 8 00	Check out and breakfast	
	9 00 - 12 00 Noon	Debriefing	J Zarafonnetis
	12 30 p m	At the Busia Uganda - Kenya border, Farewell	

PROGRAM FOR THE MEETING ON
22.5.97

CHAired BY ROSE SIGAR.

- 1 A WORD OF WELCOME
- 2 INTRODUCTION OF STAFF AND EVALUATORS - SELF ✓
- 3 BRIEF BACKGROUND OF OFPPF-KENYA PROGRAM ✓
- 4 INTRODUCING PROGRAMS FOR 23, 24, 25 AND 26 MAY 1997
- 5 REACTIONS AND ADJUSTMENTS TO THE PROGRAM
- 6 LOGISTICS - ACCOMMODATION AND TRANSPORT ARRANGEMENTS

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PROGRAM FOR THE PLENARY MEETING ON 23.5.97

CHAired BY: JOHN ZARAFONETIS/ONIM

8 00 - 9 00 a m	Registration of participants (Beatrice Lumadede)
9 00 - 9 10 a m	Self introduction of the participants.
9 10 - 9 20 a m	Introducing the purpose of the meeting Reviewing the comments of mid-term evaluation report and how they have been addressed (Pierre/Onim)
9 20 - 10 00 a m	Reviewing progress and achievements between mid-term and final evaluation (Onim and Rose Sigar)
10 00 - 10 30 a m	Coffee break
10 30 - 1 00 p m	Free discussions as guided by evaluators
1 00 - 2 00 p m	Lunch at Iom Mboya Labour College
2 00 - 3 00 p m	Evaluators to meet with representatives of the different farmer groups (Chair Pelsaud/Rose Sigar)
3 00 - 5 00 p m	Evaluators to meet with representatives of CARE-K, (-MAD and ((F
	CARE-K a) Aloys Omolo b) Francis Muoriah c) Joseph Agundah
	(-MAD a) Peter Omondi b) Charles Onyango c) Grace Ongiri
	((F a) Rose Lumumba b) Eric Ochieng' c) George Awili

Venue CARE-K Kisumu office hall

Chair Aloys Omolo/Pierre Antoine

64

PROGRAM FOR FIELD VISITS ON 24.5.97
KISUMU, VIHIGA AND POSSIBLY SIAYA DISTRICTS.

8 00 a m	Depart for Nyakach
9 00 a m	Courtesy call on the principal of Sigoti Agricultural College.
9 30 a m	Meeting with Kawuonda Women Group <ul style="list-style-type: none">- Brief on group activities- Visit to the bakery- Visit to the demonstration sites
10 30 a m	Depart for Kisumu
11 30 a m	Arrive in Kisumu
12 00 p m	Lagrotech seed multiplication farm at Kibos Visit lead farmer, Elisha Ondago's, demonstration farm
1 00 p m	Depart for Vihiga/Packed lunch
2 00 p m	Stop at Fines Ababu's home to meet other goat farmers
2 30 p m	Visit Muhanda primary school demonstration
2 45 p m	Courtesy call to ICRAF and Maseno Bucks station ✕
3 45 p m	Depart for Kisumu
4 30 p m	Debriefing of OFPPP staff

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65

FREE ON 25 MAY 97
(PRIVATE VISITS MAY BE ARRANGED)

10 00 a m	Visit Dunga Toggenburg multiplication site
12 00 noon	Lunch at Dunga
2 00 p m	Depart for Holo goat multiplication site
3 00 p m	Depart for Kisumu

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Ethiopia

May 26

Arrival 10 30AM

Meetings

11 30 Dr Eyasu Mekonnen, OFPEP

2 00 CCF

3 00 Agri Services Ethiopia

4 00 African Village Academy

6 30 PACT (Leslie Mitchell)

May 27

7 00 Field visit to Kerabu Marbu

10 30PM Departure for U S

Annex C LIST OF PERSONS CONTACTED

List of Persons Contacted

Winrock/Headquarters

Pierre Antoine, Director, OFPEP
William Sheets, Director of Development
Frank Byrnes, Senior Associate
Henk Knipscheer, Director, Agriculture
Johnnie Frueauff, Administrative Assistant, Agriculture
Andy Martinez, Senior Program Officer, Agriculture
Sarah Tisch, Director, Leadership and Human Development
Mary Laurie, Director, Communications and Public Affairs
Chris Kopp, Acting Director, Forestry/Natural Resource Management
Earl Kellogg, Senior Vice President and COO

Center for PVO/University Collaboration in Development

Mary Lou Surgi, Program Coordinator

Senegal

Alphonse Faye, Country Coordinator
Lisa Washington-Sow, Gender Specialist

OFPEP Extensionists

Amadou Diouf
Jalaan Faye
Simon Pierre Sall

Dr Wendy Wilson-Fall, Anthropologist
Rebecca Niec, USAID, Program Manager, SO-2
Oumou Ba, USAID, PVO Liaison

USAID, SO-2 Team Members

Mana Diop
Francois Faye
Mamadou Diaw
M Keita

Mamadou Diop, Peace Corps, APCD Environment
Famara Massaly, Peace Corps, APCD Agriculture
Patrick Barry, Peace Corps, Country Director
Kayego Bwaratsi, Director of PC Training Center, Thies
Tom Cussack, Advisor, NRBAR

OFPEP Farmers, Ndiayine Poste

Gnima Diop
Fatou Sylla

Moussonkepa Diop

Bineta Sonko

Fatou Sonko

Cherif Diop

Imbrhima Mane

Cheikh Sokhna

Michel K Toko-Puku, Regional Director, CCF

Lamine Niang, CCF/Senegal

Jean Pierre Ndiaye, Directeur Scientifique, ISRA

Niels Hanssens, Project Coordinator, Research on Accelerated Diffusion of Rice Technology (RADORT)

GIE members, Saint Louis

Penda Cisse

Federous Namkhru Sarr

Fatou Sall

Kane Ndiaye

Women's groups at Ross Bethio, Thilene, Soutou, Bouzoum

Mme Sy, Action Nord

OFPEP farmers, Baback

Moussa Faye

Mathio Faye

Yassin Cisse

Macoudou Faye, OFPEP farmer group, Baback

Ousemna Faye, CCF, Baback

Moustafa Faye, extension agent, Baback

Charles Sow, WVI Director, Thies

WVI Agronomists

Marcel Preira

Amadou Dia

Uganda

Dr J Moses Onim, OFPEP East Africa Coordinator

Ben R O Ekoot, OFPEP Country Coordinator

OFPEP Extensionists

Ezra Okoth

Julian Nyachwo

Nathan Koteki

Beatrice Lizobe, Gender Specialist

Sandra Blanchard, ACDI/Uganda

Bernie Runnelbaum Program Manager, PL-480, Title II

Greg Farino, USAID, FFPO

Joanne Hale, Deputy Director, USAID

Prof Mary Silver, Makere University
Harriet Nagaddya , Inoculant Lab Technician, Makerere Univ
Kizza Charles, Soil Analysis Lab Technician, Makerere Univ
Killen Kyomulangi, Seed Production Agronomist, NARO
Dr Otim Nape, Plant Virologist, Head ACMV Resistance Program, NARO

Participants OFPEP Partners Workshop in Kampala

Wilberforce Hinja, Tororo District
Samson Sooba, Tororo
Geoffrey Ouma, Tororo
Mick Emojong, Tororo
Alex Okowrig, Tororo
Perpetva Okello, Tororo
Levi Onyango, Tororo
J M Makoha, Tororo
Joel Mugoya, Tororo
Loyce Ogolla, Tororo
Jasper Okwru, Tororo
Patrick Opondo Tororo
Gertrude Namugeere, Iganga
Mohammed Swaga, Iganga
Ida Namarengo, Iganga
Peter Miwo Owor, Iganga
Kagawa Kate, Iganga
Sheikh Azila, Iganga
Charles Mwanje, Mukono
David Livingstone Muwankika, Mukono
John Kutesakwe, Mukono
William Buttono, Mukono
Muhammed Gitta, Mukono
Mark Mutesasira, Mukono
Arnout Desmet, Country Coordinator, COOPIBO
Mrs Kevin Makokha, Dep Program Coordinator, COOPIBO
Ruth Kiwanuka, Coordinator, Joint Energy and Environment Projects (JEEP)
Mrs Kevin Sebina, Training Officer, JEEP
Richard Kiboa, Agriculture and Forestry, JEEP
OFPEP Farmers, Mukono
Victor Nsubuga
Suddi Tenya
Pros Mutabasi
James Lugaude
Nanungi Musoke
Mohammed Swaga, OFPEP Farmer, Nakalama
Scott McNiven, Monitoring and Evaluation Officer, PL-480, Title II
Peter A Ssentongo, Monitoring and Evaluation Officer, PL-480,

George Wafula, OFPEP Farmer, Sikhubira Group, Tororo
Geoffrey Ouma, Trainer, Sikhubira Group, Tororo
Julius Sitanga, Kawabona Farmers Group, Tororo
Bidiny Byanyumba, Manbula Mudebi Women's Group, Tororo

Kenya

Dr J Moses Onim, OFPEP East Africa Coordinator and Director of Lagrotech Assoc
Rose Sigar, OFPEP/Kenya Coordinator
David Agutu, OFPEP Extensionist, Vihiga District
Boaz Oloo, OFPEP Extensionist, Goat Program

OFPEP Extensionists

Henry Ouko
Nelson Omondi
Caroline Skiuku
Erick Omondi
John Byaruhanga, Maseno University College
Paul Okongo, Farmer Group Leader
Alok Ononyango, Women's Group Leader
Joel Orwa, OFPEP Lead Farmer, Homa Bay District
Elijah Onjor, CBO, Grail Centre, Kisumu District
Albert Mukaya, Group representative, Vihiga District
Ibrahim Oyondi, Group representative, Vihiga District
Alex Mbato, Ongira Women's Group,
Margaret Oduar, OFPEP Farmer Group, Siaya District
Anne Awuor, CBHC, Ugunda District
Vahid Cheloti, OFPEP Student Volunteer
Ruth Amolo, FPAK, Siaya District
Wycliff Otwal, Field Officer, Forestry Dept, Min of Natural Resources
Agre Omondi, Facilitator, Methodist Church Women's Group, Siaya
Mary Omondi, Facilitator, Methodist Church Women's Group, Siaya
Florence Osido, Anglican Church Women's Groups, Siaya District
Margie Mulaya, Action Aid, Vihiga District
D Onim, Hi Tech Computer Services, Kisumu
Victoria Ojunga, Ogoro Women's Groups
Alop Omollo, CARE/Kenya
Susan Odongo, Kuwounda Womens' Group
Augustine Mumma, Lead Farmer and Kawounda Womens' Group
Joseph Obongo, WVI
Japeth Ouko, WVI
Christopher Osoro, Manager, Sigoti Rural Training Center
Emma Mumma, Kawounda Women's Group

OFPEP Farmers (Goats)

Justus Ndenga

Finus Ababu
Fneens Alla
Nathan Anaya
Festus Alumasa

Mr Mukaya, Headmaster, Muhanda Primary School (demonstration site)
Ephraim Oyondi, Agriculture Teacher, Muhanda Primary School (demonstration site)
Elihsa Ondago, OFPEP lead farmer

Ethiopia

Dr Eyasu Mekonnen, OFPEP Country Coordinator
Leslie Mitchell, PACT Program Officer,
Kibre Dawit, Director, African Village Academy
Asrat Asefaw, AVA
Bezu Demelash, Extensionist, AVA
Mr Alemayhu, Secretary, AVA
Abebe Gitma, AVA
Yoseph Meneshu, Program Manager, CCF
Haile Hailemeskal, Program Coordinator, Agri-Services Ethiopia

OFPEP Farmer, Kerabu Marbu

Seadı Mohommed
Demeke Besema
Tegistu Begeru
Masete Lamal
Korea Kegassa
Meneber Ayano
Shume Tegne
Tefera Orzon
Grezahegn Worku
Mulugeta Bedda
Abduleselem Shegema
Tsegaye Glimariam
Sebegashau Shorwa
Senayete Belew
Deno Awole
Abebe Gebete
Beser Chegre
Belete Mekonnen
Mubarek Deno
Abebe Alemayhu
Awole Aberor
Tememe Lede
Yemamae Muse
Tefera Wlmariam

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References Consulted

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**Annex E LESSONS LEARNED BY WINROCK
FROM THE OFPEP EXPERIENCE
(compiled by Winrock)**

Lessons Learned

About the Smallholder Farmer

- **knows how to recognize a good technology**
- **knows his/her socio-economic context and inherent constraints better than anyone else**
- **welcomes assistance to access information on new technologies**
- **can be very entrepreneurial if well identified incentives are present**
- **gives priority to risk-adverse strategies**
- **is an efficient diffuser of technologies**
- **is in general very appreciative of program initiatives such as OFPEP**
- **is willing to reassign gender responsibilities when appropriate**

Lessons Learned

About Implementing Agencies

- **NGOs, CBOs, and farmer groups initially are skeptical of the private sector**
- **NGOs have unwarranted confidence in NGO sector and hold frequent false assumptions or information about technology and abilities**
- **some NGOs are technically competent and retain personnel who are**
- **most NGO personnel respond rapidly to sharply focused training**
- **most NGO personnel speak site specific languages and dialects**
- **employ some local staff who are extremely helpful**
- **experience with U.S. Peace Corps Volunteers generally excellent**
- **NGOs perform critical first step in introducing technology to farmers**

Lessons Learned

About Government Agencies

- **programs must work closely with national research and extension system**
- **programs must include locally developed varieties in field trials, demonstrations**
- **link NGOs and farmer associations with experiment stations and research staff**
- **welcome extension participation in all training, field trials, and demonstrations**
- **invite educational institutions, at all levels, to participate in activities**
- **can provide facilitating policies and incentives**

Lessons Learned

About Private Sector

- **difficult for small farmers to get loans from private banks because of high interest rates and lack of collateral**
- **focus on specific products or services, less on production or marketing system as a whole**
- **rapport weak with NGOs and extension services**
- **small farmers can become commercial seed producers**
- **needs intermediaries (NGOs or others) to develop product demand**